Public Utilities

Volume 58 No. 1



July 5, 1956

INVESTORS' VIEW OF MANAGEMENT AND REGULATION

By John F. Childs

Telling the Story of Employee Benefits

By S. F. Leahy

Let's Get to Know Each Other

BOSTON

A Symposium on Natural Gas Produced Regulation

INDEX to Volume 57 Included in This Issue



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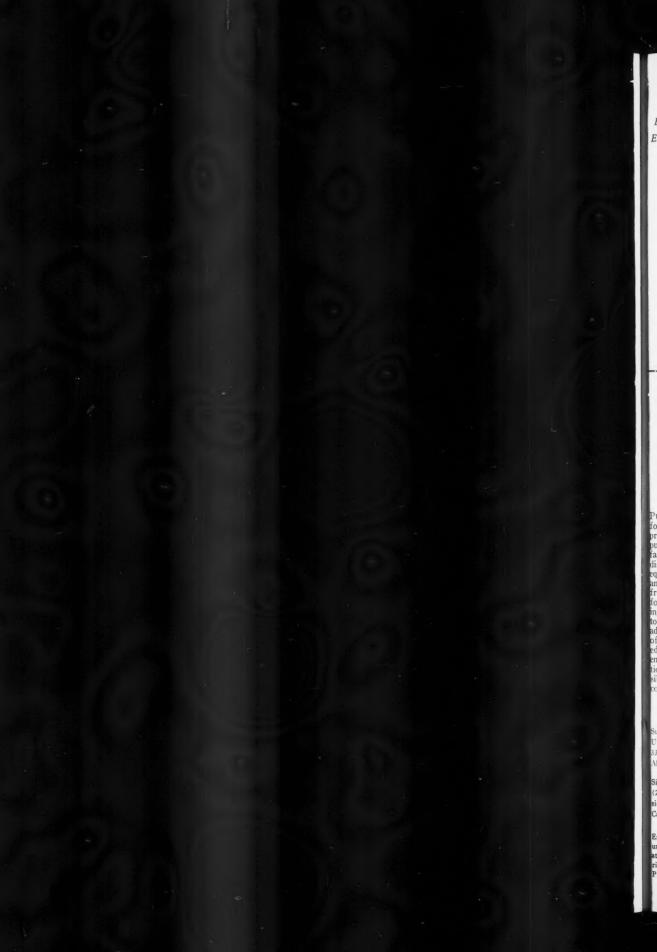


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Public Utilities

VOLUME 58

JULY 5, 1956

FORTNIGHTLY

NUMBER 1



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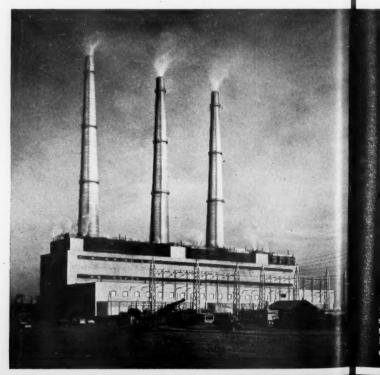
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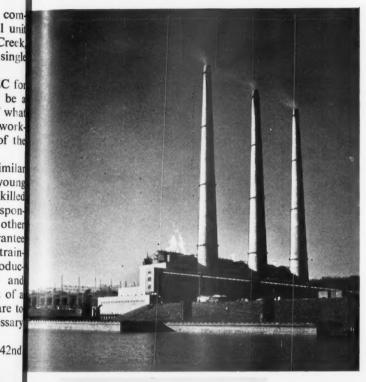
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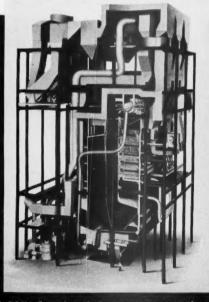


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Pages with the Editors

HE testing and appraisal of utility I management and utility regulation certainly are not new in this country. Both are quite used to it. Both are constantly being evaluated from a variety of quarters. From the regulatory point of supervision, utility management lives in a veritable goldfish bowl day in and day out -making periodical reports and making available accounting entries at all times. Almost equally continuous is the auditing of utility operations by tax authorities at different government levels. Then there are the periodic checks and investigations by legislative committees, consumer representatives, and the ubiquitous and ever curious press.

But what do the investors think of utility regulation and utility management and how do they arrive at their conclusions? After all, it is the investors who "make the mare go" from the standpoint of private enterprise operations. Admittedly, the small investor must rely on hearsay and established financial references and recommendations. But the large-scale or institutional investor is a different breed. He makes his own independent investigations and arrives at his own conclusions.



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JOHN F. CHILDS

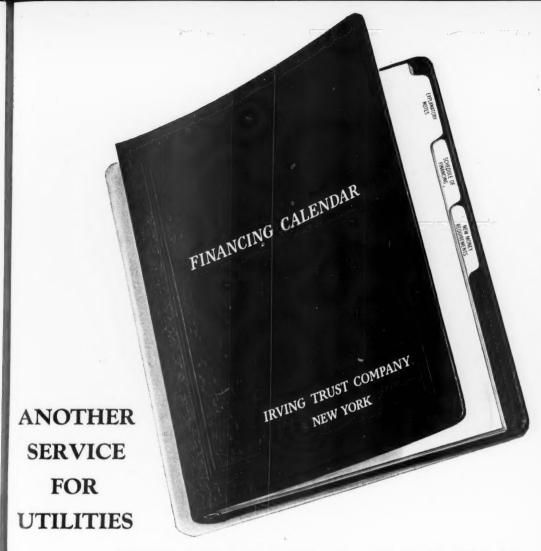


S. F. LEAHY

What is the technique of this well-informed investor? While there is no such thing as a formula which this class of investors applies in evaluating management and commission regulation as they affect management, there is no doubt but that well-informed investors do make a serious and systematic appraisal of both.

THE opening article in this issue is a very revealing "investors' eye view" of how both utility management and commission regulation are weighed in this particular scale. It contains literally dozens of questions which investors want answered before putting their money into utility securities or before being satisfied with keeping it there.

The author of this article is John F. Childs, vice president and head of the Irving Trust Company's utility department, well known for its public utility round tables and other special services for the utility industry. He has been the author of numerous articles on finance and investor relations and cost of capital, and has appeared before regulatory commissions on financial matters. A graduate of Trinity College (BS) of Hartford, Connecticut, Harvard Graduate Business School (MBA, '33), and Fordham Law



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JOHN D. GARWOOD

School, Mr. Childs started his career as a public utility security analyst with Dick & Merle-Smith in New York city before joining the Irving Trust Company in 1947.

Now and then we hear actual stories of working people who get into debt and other difficulties in order to take care of troubles which they did not know or realize were provided for under benefits made available by their employers. The article in this issue beginning on page 17 comes to grips with this very practical problem of telling the employee, as well as others, what these benefits are and how they can be obtained. It is not enough to set up sound benefits. Their value is lost if the employee forgets about them or does not understand how and when he can use them.

S. F. LEAHY, author of this article on "Telling the Story of Employee Benefits," is a native of Evanston, Illinois, and a graduate of the University of Michigan (BS) in electrical engineering. He joined The Detroit Edison Company in 1931 and rose to the post of manager of employee relations in 1945. He is a member of various engineering and professional groups.

THERE is no question about the fact that professors far removed from the actuality of business should get together with businessmen. The article in this issue which begins on page 22 might give

some of the professors and businessmen an idea. Economic theory and actualities in industry seem to be far apart, as is indicated by the attitudes of many professors. It outlines a practical approach which many professors and utility management have actually used in reaching common ground and better understanding of each other's point of view.

The author of this article on bringing college professors and utility management people together is Professor John D. Garwood, who teaches economics at the Fort Hays Kansas State College. He is a graduate of the University of Wisconsin (MA) and the University of Colorado (PhD), with postgraduate studies at the universities of Louisiana and Southern California. He taught at the two latter institutions before joining the faculty of Fort Hays Kansas State College.

THE recent hearings of the special Senate committee investigating lobbying on the natural gas producer exemption bill have reawakened interest in the need for such legislation. Now that the bill has been vetoed by President Eisenhower, the question arises whether new exemption legislation can be successful or whether some alternative legislation would be more practical. There is even some speculation as to whether any legislation affecting line gas producers is needed at all.

In the "What Others Think" department of this issue (beginning page 42) there is a review of some recent articles on this subject which have appeared in two of the nation's leading university law publications. One deals with the natural gas symposium issue of *The Georgetown Law Journal*, devoted entirely to this subject. The other review deals with a featured commentary in the spring issue of the *Cornell Law Quarterly*.

THE next number of this magazine will be out July 19th.

The Editors



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Coming IN THE NEXT ISSUE

(July 19, 1956, issue)



THE TRUSTEE RESPONSIBILITY OF A STATE COMMISSIONER

With each passing year public utility operations continue to become more vast in scope, more important, and more complex. Dollarwise, or by any other standard, the job of regulating utility service is a much more difficult and delicate operation than it was five, ten, or twenty years ago. There is the responsibility of balancing the interests not only of investors and consumers but also of different classes of investors and consumers within the framework of the over-all public interest. In addition, the modern public service commissioner is supposed to weigh such matters as conservation, economic and social implications. In short, the modern commissioner's job is becoming that of a real trustee of the public interest. W. F. Whitney, now consultant and former chairman of the public service commission of Wisconsin, has written a thoughtful and penetrating article about this tremendous increase in the responsibilities of a regulatory commissioner's job. The author last year was president of the National Association of Railroad and Utilities Commissioners.

SPLIT DECISION ON SANTEE-COOPER

Early last year as Governor James F. Byrnes was leaving his office as the head of the state of South Carolina, a legislative investigation was launched into the operations of the South Carolina Public Service Authority, better known as the Santee-Cooper project. It was not the first time, and may not be the last time, that the controversial experiment of the state in the electric power business attracted legislative scrutiny. Charges of inefficiency, mismanagement, and unprofitable operations were among the items investigated. The result has been an inconclusive report by a split decision. It is agreed that Santee-Cooper has improved its position but that it has suffered from financial deficiencies and managerial mistakes made in good faith. But while a majority of five cleared the management of charges of incompetence, a minority of four tailed to do so. W. D. Workman, Jr., well-known journalist and now free-lance writer resident in Columbia, South Carolina, has analyzed the majority and minority reports and has written an objective account of both points of view.

TO SELL BUSINESS LOAD, PICK ENGINEERS!

It is one of the anomalies of present-day business promotion in many lines that good salesmanship and engineering know-how must go hand in hand. This is especially true in promoting ready home and business uses of electricity. The engineer's know-how must be enlisted, not only to take care of such technical factors as load building and load balancing, but also for such commercial aspects as discovery and establishment of new sales opportunities in places where they did not exist before. Many engineers who might have been tempted to adopt a cavalier attitude towards pure salesmanship, as such, in years gone by, are finding the new business challenge both intriguing and stimulating. O. K. Buck, manager of commerical-industrial business for the Los Angeles Department of Water and Power, has explained the importance of this new rôle of the engineer-salesman in an exclusive interview for the FORTNIGHTLY with James H. Collins, professional author of business articles, resident in Hollywood, California.



Also... Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.



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RATE OF RETURN

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ONE of the most important subjects, if not the most important subject, constantly confronting utility managements, regulatory commissions and others concerned, is the amount of return to be allowed public utility companies and how best to determine that return. After almost four

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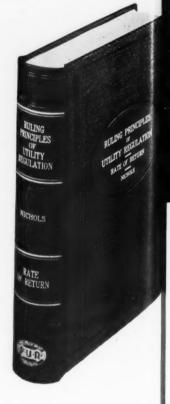
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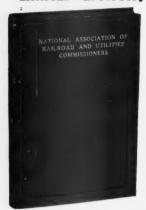
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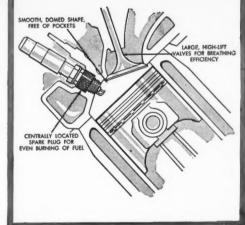
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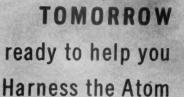


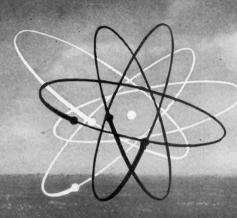
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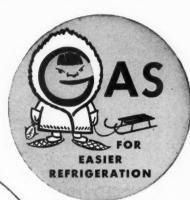




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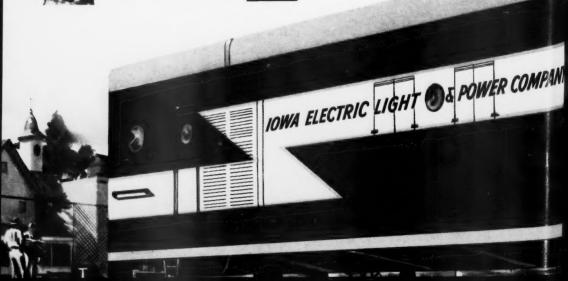
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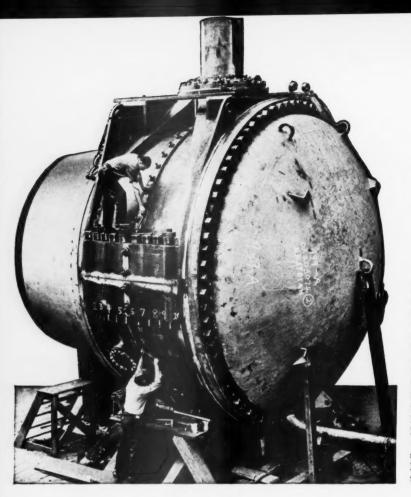
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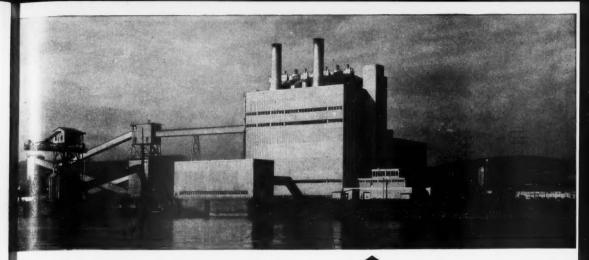
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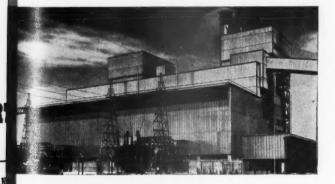
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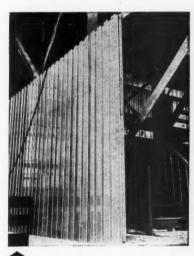
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Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.



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UTILITIES

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JULY

Thursday-5

National Association of Railroad and Utilities Commissioners will hold annual convention, San Francisco, Cal. July 24-27. Advance notice.

Friday-6

Columbia University, Industrial and Management Engineering Department, will hold annual utility management work shop, Harriman, N. Y. July 29-Jug, 10. Advance notice.

Saturday—7

Western Electronic Show and Convention will be held, Los Angeles, Cal. Aug. 21-24. Advance notice.

Sunday-8

American Bar Association will hold annual meeting, Dallas, Tex. Aug. 27-31.

Advance notice.

Monday-9

National Housewares and Home Appliance Manufacturers Exhibits begin, Atlantic City, N. J.

Tuesday-10

Michigan Independent Telephone Association will hold annual convention, Grand Rapids, Mich. Sept. 6,7, Advance notice.

Wednesday—11

New Jersey Gas Association will hold annual meeting, Spring Lake, N. J. Sept. 7. Advance notice.

Thursday—12

Southeastern Electric Exchange, Personnel Administration Section, begins meeting, Savannah, Ga.

Friday—13

Pacific Coast Gas Association will hold annual meeting Coronado, Cal. Sept. 11-13. Advance notice.

Saturday—14

American Institute of Electrical Engineers will hold annual electrical conference of the petrolcum industry, Kansas City, Mo. Sept. 12-14. Advance notice.

Sunday—15

American Water Work Association, New York Section, will hold annual meeting, Lake George, N. Y. Sept. 12-14. Advance notice.

Monday—16

International Organization for Standardization begins council meeting, Geneva, Switzerland.

Tuesday-17

Me West Gas Association
with hold gas school and
conference, Iowa State Colley, Ames, Iowa. Sept. 1214. Advance notice.

Wednesday—18

Maryland Utilities Association will hold fall conference, Virginia Beach, Va. Sept. 14, 15. Advance notice.

Thursday—19

Public Utilities Association of the Virginias will hold annual meeting, White Sulphur Springs, W. Va. Sept. 14, 15. Advance notice.

Friday-20

Western Summer Radio-Television and Appliance Market ends 5-day western merchandise mart, San Francisco, Cal.



Courtesy, The Toledo Edison Company

The Utility Trainman (For story on utility employee benefits, see page 17.)

Public Utilities

FORTNIGHTLY

Vol. 58, No. 1



JULY, 5, 1956

Investors' View of Management And Regulation

What are the questions which well-informed investors ask in testing the balance, efficiency, and other qualities of utility management and regulation? Here are literally dozens of such questions asked by investors every day—a comprehensive "investors' eye view" of many things, good, bad, and indifferent, which investors want to know about before putting their money into utility securities.

By JOHN F. CHILDS*

WHENEVER investors are asked the following two questions, their answers are always, yes:

Is management important in decisions to buy or sell securities?

Is regulation important?

In my contact with the financial com-

munity since 1935, I have heard this matter discussed numerous times. At the Irving Trust Company, we have held round-table discussion groups and financial seminars for many years at which a great number of informed investors have presented their views about utility companies. They have invariably commented on these two aspects.

For example, when a representative of Keystone Custody Fund, one of the

^{*}Vice president, Irving Trust Company, New York, New York. For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

largest investment companies, appeared at the round table, he explained how his company uses a two-page, single-spaced questionnaire on management. It considers it one of its most important analytical tools in making its decisions. And similarly, speakers have emphasized the importance of regulatory atmosphere.

Thus a most emphatic "yes" to both questions!

And whenever the matter is discussed, management and regulation seem to be quite interested in just how investors appraise them.

I shall try to explain the investors' views on this subject. My comments, of course, are bound to be colored by my own thinking, but I shall try in so far as possible to present an over-all reaction of investors. In the limited space of this article not all points can be covered, but what is covered should be sufficient to afford a general impression.

OF course, investors recognize that the power or effect of management and regulation is limited by the economic character of the industry. The investors assume the very substantial risk that the industry may become economically unprofitable through no fault of management or regulation.

Furthermore, the favorable or unfavorable economic characteristics of the industry determine the difficulty of the job to be done by management and regulation. An unprofitable industry is more difficult to handle than a profitable one. Fortunately, at least part of the utility industry has had favorable economic characteristics—particularly the electric industry. There seems to be unlimited demand for electricity and generally favorable cost

features. Thus, in the electric industry at least, management and regulation have had an attractive field in which to work. This has been somewhat less true in the telephone industry and in the natural gas industry. The manufactured gas and transit businesses have obviously encountered overwhelming problems. Within such economic limits, it is up to management and regulation to make the industry prosper or deteriorate.

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In final analysis, such deterioration can mean just two things:

First, inadequate earnings and thus unfair treatment to an important segment of our economy, the investors. The investors are the "savers who have put up the money through insurance policies, savings banks, pension funds, investment companies, and through other indirect media, and also through direct investment. Our system of private capital cannot hold together and prosper if this segment is unfairly treated. And if they are not fairly treated, the consumers are bound to suffer in the long run through unsatisfactory service.

Secondly, government ownership! Let's not mince words; whether it be municipal, state, or federal, government ownership is Socialism. This is a sad fate from the point of view of the consumers, the taxpayers, economic progress, and every conceivable angle as long as private industry can do the job.

How Management Is Appraised

THERE is no such thing as a formula which investors apply in evaluating management and regulation. Various in-

INVESTORS' VIEW OF MANAGEMENT AND REGULATION

vestors do not necessarily emphasize the same things. It is more a matter of "feel" through long experience and close contact in the utility field. However, in arriving at their final judgment, there are many factors which they must consider. Of course, investors must and do take a broad view, rather than, as might be assumed, a wholly selfish approach.

The following is a frequently used analogy of the position of the elements which make up a utility company. Visualize an equilateral triangle. The consumers are in one corner, investors (savers) in another, and employees in the other—with management in the middle of the triangle. For management to do a good job, investors recognize that management must treat well and fairly not just the investors, but *each* of the three elements at the other corners of the triangle.

I also like to think of regulation being inside this hypothetical triangle, alongside of management. Regulation has an obligation to two groups—consumers and investors—to keep a fair balance between them.

Now, let us concentrate on management. Is strong proxy support a guaranty of good management to the well-informed investor? Unfortunately, I

must say that I have had too close contact with the matter of proxies to feel that a high proxy vote is any real indication of how the informed investors may feel about management.

Investors wish to be assured, above all, that management realizes its triple responsibility, and does not unfairly favor any one of the three elements—the consumers, the investors, or the employees.

I HAVE heard the management of one company, for example, say that it is its exclusive job to take care of the investors and to let regulation take care of the consumers. For the long pull, I do not think investors would want that type of management. It would be bound to run into trouble, eventually. Management must at all times be fully cognizant of fair treatment for the consumers.

On the other hand, management should be equally conscious of the investor. It should not delay seeking a rate increase if needed to give the investors reasonable treatment. Some companies have been too hesitant about this. Utility common stocks cannot be expected to offer the appreciation possibilities of some industrials. Yet the stockholders of utilities are certainly entitled to some gradual increase in earnings and dividends. And management

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PUBLIC UTILITIES FORTNIGHTLY

should lay plans to achieve this goal. Management should recognize inflation and what it does to investors.

As for the employees, it obviously would not be considered good policy to attempt to show low expense ratios by paying too low salaries.

Thus, a matter of balance is most important. Lopsided emphasis on some particular "pet" of management may indicate a lack of proper balance in management itself. There should also be an over-all feeling that management is looking into the future and continuously trying to establish, on an equal basis, better programs for consumers, investors, and employees.

Understanding Industry Economics

A UTILITY company, because of its nature, has a service area monopoly for its own product. Regulation is based on this fact. Top management should be completely conversant with the economic principles of the industry and the economic basis of regulation. It is a utility company's very basis of existence.

How should fair return be determined? What is the sound type of rate base from an economic point of view? What is the relationship of cost of capital to fair rate of return? If management cannot give a complete statement on these subjects, it is bound to make decisions which will be economically unsound. Listening to management comment on these subjects quickly reveals the degree of knowledge or lack of it. Surprisingly, some managements not only lack such knowledge, but do not even seem to be interested in acquiring it.

Management must be continuously prepared to justify its belief in what is a fair return. To assume that a company is not going to have to be in a rate case is a headin-the-sand attitude. It follows, also, that even if a company does not need a rate increase, it should not attempt to earn more than a fair return. This may vary, depending on all the surrounding circumstances. In any event, management should know exactly when to reduce rates, and this requires a thorough and up-to-date knowledge of fair return. It is a continuous responsibility. The lack of knowledge of some management officials in this area has been dramatically revealed when they faced their first rate case. Poorly prepared presentation has caused irreparable damage.

As for economic principles, investors are interested in the management approach to the form of rate schedules. A proper approach is needed to assure profitable development of load and fair treatment to new as well as old customers, and as between the various classes of customers. Mere growth is no asset unless it is on a sound and fair economic basis.

Public Relations

In all its various aspects public relations certainly ranks at the very top in investors minds in evaluating management. I think all investors expect that management will consider it a primary duty to afford excellent quality of service. Most companies do provide excellent service. It is surprising, however, that stories about a few companies which do not seem to render adequate quality of service get back to the financial community.

There seem to be five basic reasons for the importance of sound public relations:

1. Utility customers, because of the utility's service area monopoly, are captive customers. If they do not like some-



Relationship of Finance with Regulation

adequate or complete unless it is closely co-ordinated with regulation and rate case work. It could be most damaging for a company's position to have a financial expert ignorant of the ramifications of regulation, or one who does not consider each financial move in relation to its regulatory significance. In a few companies, unfortunately, financial policy is handled by one man and regulatory matters by another, without co-ordination. Then there are situations where the financial officer handles both but is not adequately conversant with regulatory matters."

thing the company is doing, there is no way for them to escape, as they can do with other business contacts. If they do not like one type of car, they can buy another, or none at all. But utility bills like taxes cannot be evaded or avoided. In our generally free economy, this point is bound to cause certain frustrations, unless precautions are taken.

Most customers do not have the vaguest notion about the costs involved in furnishing utility service. Many are not aware that there is a utility commission to protect them against abuses. Yet, because they are required to pay a bill regularly, they are susceptible to prejudice against the company. Only through better understanding can we expect reasonable, favorable reaction from utility customers. It may seem like a hopeless task to expect them to understand. However, if such a defeatist attitude is taken the game is a total loss.

2. In fairness it should be noted that the utility industry is not entirely blame-

less for being the "whipping boy." None will defend some of the unfortunate practices in the 1929 era. Today most utilities are well managed, efficiently operated, and provide excellent service. Yet, the errors of the past are still remembered by some consumers.

3. Since consumers are also voters and because of what has been noted in the foregoing paragraphs, utilities still make ideal targets for unfair politicians.

4. We all know that the cost of living has almost doubled since before World War II and that most prices for most other items have gone up correspondingly, whereas the price of electricity is just about the same as before World War II. Other utility services have increased in price but certainly not nearly to the extent of other commodities. Thus, on any logical basis, one must conclude that the utility rate level is not one of the major problems, except possibly in areas where there is unfairly subsidized government competition. By the same token, it does not appear that industry problems can be solved by stepping up over-all economies. Such economies have already been phenomenal and we can be sure they will continue along that line. Thus, irrational consumer response to any reasonable rate adjustments can only stem from a lack of understanding. This, in turn, emphasizes a stark need for a sound and persistent public relations treatment.

5. Regulation is particularly sensitive to poor public relations because it makes the regulator's job much more difficult.

In short, what is needed is a better realization on the part of consumers that

(a) service is excellent; (b) rates are reasonable and the consumer's interest is being watched; and (c) business-managed power service is better than government power service. The industry has a long way to go in getting its story over to the public. More of the excellent type of effort spent on efficiency and service could also be devoted to a long-range program of public education at the grass roots. An enlightened public represents the only hope of preventing unfair or unthinking politicians from picking on the utilities.

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The term public relations, of course, is used here in its broadest sense. It must start with the employees. It is they who must go out working for the company, building good will every step of the way. In order to be salesmen, employees must understand the nature of the industry and what can be accomplished through public relations. A training program along these lines seems essential.

A fine example of this type of training program was recently devised by Georgia Power Company to thoroughly inform all employees on all the angles of private enterprise *versus* public ownership in the power business. That company set up a speakers' bureau consisting of sixteen employees, trained from within the company, to cover eight different phases of the subject before groups of all employees. Every matter involving public relations can and should be covered in a similar manner.

As to other aspects of public relations, it is most encouraging to investors to hear about programs which companies arrange with various influential groups in the service area to promote better understanding. Such programs wisely encompass plant visits and group meetings for

INVESTORS' VIEW OF MANAGEMENT AND REGULATION

teachers, ministers, stockholders in the area, commercial bankers, newspaper editors, etc. Continuous personal contact with all large users of utility service is most valuable. Area development programs win good will in the territory. Thus, vigorous "grass-roots" public relations programs of all types get a big "gold star" from investors in their appraisal of management. I have italicized the words "better understanding" because all public relations methods should be for that purpose alone and not tinged with any idea of "glorification" for management, which does not help and, on the contrary, can strike the wrong tone.

Investors do not feel that a company is doing a good job in public relations unless it has some adequate means of continuously testing (preferably through an outside means) the reaction of its customers. Self-appraisal by management on this is not convincing. Investors are vitally interested in customer reaction to quality, the reasonableness of rates, and government ownership. Investors are critical when any company management outside of a government power area says it has no public ownership problem. Every utility company has such a problem in its own back yard because the U.S. Senators and Representatives from every state in the

Union are responsible for passing bills which may at some time adversely affect all power companies. This is particularly true of the so-called "preference clause" in most federal power statutes which gives to publicly owned or co-operative utility systems a priority for power generated at government plants. With the possibility of government-subsidized atomic power one never knows when government power will be a threat in any area. A company's management is closing its eyes to reality when it says that only utilities located in an area where the battle is going on, are affected by this.

OVERNMENT power is one of the important problems facing the electric utility industry. About 21 per cent of the electric industry is already socialized. Once socialized the step back to private power is almost impossible. Thus, this 21 per cent cannot be allowed to expand. No matter what answer or explanation is given, one thing that occurred in 1955 stands out vividly in the minds of investors. The Dixon-Yates generating plant, carefully and honestly conceived, was turned down in favor of Socialism. Each company should be able to give tangible proof that a very high percentage of the people in its territory favor private power. Otherwise

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"Investors perhaps have an easier time in evaluating the fairness and quality of regulation than in appraising management, because any shortcomings along this line are revealed in regulatory decisions. Investors naturally note carefully the composition of the rate base and the level of the rate of return used. However, they will scrutinize the regulatory authority much more carefully than just the mere 'end result'—which is often the limit of appellate court supervision of regulatory action."

PUBLIC UTILITIES FORTNIGHTLY

that company has not done its public relations job.

While many of the above comments have been directed at electric companies, the public relations question is similarly viewed by investors for all types of utilities. And while only certain avenues of public relations have been touched upon here, all possible media for this purpose will be considered by investors.

Financial Policy

FINANCIAL policy may be considered most important to the investors. As already stated, investors expect management to understand their position. They rightly expect a gradual increase in earnings and dividends for the common stock and a recognition of the impact of inflation. For capital industry such as public utilities, however, financial policy means much more than that. Perhaps the two most important general considerations along this line are debt ratio and dividend pay-out.

There is no over-all agreement among investors as to what correct financial policy should be. Taking a long-range point of view, however, let us consider the following observations:

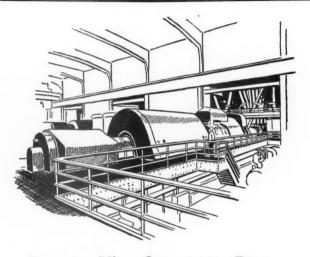
Because of the large amount of capital that the utility industry must raise under practically all conceivable circumstances, and with unusually large bond maturities facing it, management must have very sound reasons for its long-term financial policy for years ahead—for bad times as well as good, for bad times in the securities market, poor business conditions, adverse conditions for the industry and the particular company.

A naïve statement to hear from a president or financial vice president is, "I will be retired when the long-term bonds come due." That should not be said even as a joke. An equally unfortunate statement by management: "Oh, the industry is economically so strong today the future is assured." What crystal ball does such management use? The management which issues long-term debt must lay the foundation for the company's ability to take care readily of the maturity. It is an absolute fact that no management has the ability to foresee what may happen to the industry in the many years that lapse before maturity of long-term bonds.

FORTUNATELY, the utility industry can look with pride on the general improvement in its credit standing. A number of companies have had their bond ratings upgraded from A to Aa and there are others on the verge of such an increase. This has not been easy, but it has been constructive. It takes character to keep a good financial statement; it takes a little more to achieve one.

Management must have a comprehensive answer on dividend policy. An unthinking statement about dividend pay-out by an officer of a company is, "High payout means higher price for a stock." That is only one consideration.

It is also interesting for investors to view how a company's management arrives at final decisions on financial policy. Does it rely solely on its own judgment? Does it rely on just one outsider who may have definite prejudices? Or does it seek various sources of outside advice and then consider its decisions in the light of this broad canvass? Certainly this latter approach is bound to produce better decisions in the long run. Also it is important for investors to know that management makes



Investors View Government Power

GOVERNMENT power is one of the important problems facing the electric utility industry. About 21 per cent of the electric industry is already socialized. Once socialized the step back to private power is almost impossible. Thus, this 21 per cent cannot be allowed to expand. No matter what answer or explanation is given, one thing that occurred in 1955 stands out vividly in the minds of investors. The Dixon-Yates generating plant, carefully and honestly conceived, was turned down in favor of Socialism. Each company should be able to give tangible proof that a very high percentage of the people in its territory favor private power."

its financing plans at least three years ahead and preferably five, with a review and revision each year.

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ANALYSTS, of course, can get a good idea of how management has performed financially from a study of past balance sheets and income statements. Management should realize that every financial step is an indelible imprint in the financial sands of time, as an example of what management believes.

No financial policy, however excellent in itself, will be considered adequate or complete unless it is closely co-ordinated with regulation and rate case work. It could be most damaging for a company's position to have a financial expert ignorant of the ramifications of regulation, or one who does not consider each financial move in relation to its regulatory significance. In a few companies, unfortunately, financial policy is handled by one man and regulatory matters by another, without

co-ordination. Then there are situations where the financial officer handles both but is not adequately conversant with regulatory matters.

Investor relations is really a part of the broad term, financial policy. The financial community is particularly sensitive to the way a company handles its relations with investors. They rightly expect a wellplanned program to keep them informed of all developments about a companythe good as well as bad-so that the securities will reflect their true value. A company known for only "fair weather" information certainly gets a black mark very quickly. It is shortsighted for companies to rush to the financial community with only optimistic information before a security offering, then fail to offer complete information when some adverse difficulty occurs.

The utility industry, because of its tremendous and continuous need of capital, is far ahead of most other industries in the matter of investor relations. However, we still see a few examples of companies which do not perform this important function properly.

Investor relations, incidentally, should be co-ordinated with rate case work. When investors visit a regulatory authority and hear that the commission is under the impression that a certain management "cries the blues" in regulatory proceedings, and then tries to make its company look like a triple "A" stock with growth galore to investors, a note of insincerity is quickly detected.

Efficiency of Operation

Investors carefully consider efficiency of operation, from all angles: generation, accounting, maintenance, etc. How-

ever. I believe this comes after the matter of public relations, for various reasons. As already noted, utility service is very cheap in relation to all other commodities. So price alone is not the major problem, except where unfairly subsidized government competition is a threat to electric companies. Furthermore, it is generally accepted by investors today that, considering all the great manufacturing companies which build equipment, there is a constant pressure for companies to adopt more efficient ways of doing things. Investors expect efficiency as a matter of course. Efficiency of operation is scrutinized for any clew showing whether management is as alert as it should be. While, generally, no large star may be awarded for efficiency, it can be said that where inefficiency is noted it gets a quick black mark.

Of particular interest at present is the attitude of management toward atomic energy. Does the management of a given company feel that it should take part in some program, in order to keep its organization adequately informed on the subject? Investors believe that expenses incurred in this connection are quite justified. They indicate a company's effort to stay abreast of research, just as would be expected in the case of an unregulated industrial company.

Directors

As an indication of how carefully analysts may look at over-all management, here are listed some of the questions which investors consider with respect to the directors of a company:

Are they strong men who will express their opinion, or mere "yes" men for the president?

INVESTORS' VIEW OF MANAGEMENT AND REGULATION

Do they represent territory, or are there many absentee directors who have no contact with the territory?

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What is their experience and background?

Do they own stock in the company? Are they connected with some organization with which the company is doing business, so that the utility is not free to choose other organizations?

Is there an age limit for the directors? How many officers are directors?

Employees

As another example of the scrutiny with which investors may look at over-all management, the following list of questions are among those which well-informed investors may consider about a company's employee relations:

What training programs are there for employees?

Are the training programs all inside the company which gives the impression that the company knows all the answers, or do they plan a balanced program with outside contacts?

What type of men does it hire?

Is it seeking the best young men available—will they be good-will salesmen for the company?

What kind of a pay scale does the company have? Is it a sharp pyramid at the top or a well-balanced pyramid?

Is it a team organization? How about the second-string team? Is there an adequate reserve?

Is healthy competition among employees accepted, or is there a political tendency to promote "yes" men around the president and stifle merit promotions? Does "politics" or merit count?

Are there adequate retirement provisions and other employee benefits?

Are there trouble makers in the company? (There is no excuse for fighting within the industry—investors do not like it. This does not mean elimination of normal and desirable American competition for better achievement.)

Are employees encouraged to join civic organizations?

Does top management work as hard as it expects the employees to work without receiving special favors or special extended vacations? (This is not a major problem in the utility industry. Most top managements are in fact very much overworked. Where it does occur, however, it can be a serious handicap from the viewpoint of both operating efficiency and employee morale.)

Is there any tendency for top man-

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"Sometimes one hears a utility executive say, 'We can run our business without regard to regulation; regulation is only an annoyance and hindrance.' Bad regulation may be just that. However, regulation is just as much a necessity to the industry as management because of the industry's monopolistic nature for its own products. It is better for investors to hear that management recognizes this fact and makes an effort to get along and keep in close touch with regulation, whether or not there is a rate case in progress."

agement to seek self-glorification? (Obviously an ill-will builder.)

Are too many relatives included in the company, whether as officers or staff?

Is there adequate two-way communication between top management and the rest of the organization?

Is there generally good employee morale—with a feeling that the company is a good place to work, and that it has a democratic scheme of organization?

Are employees unionized? If so, how does management get along with the union?

Analysts are occasionally amused at statements about employees in some annual reports. They realize, of course, that such statements are necessary and may be entirely sincere. But they are no help to analysts in evaluating a management's employee relations. There is a standing comment among analysts that some companies have had major strikes in spite of high-sounding phrases in annual reports about employees. Certainly when there is a strike in a utility company, *someone* is to blame. Regardless of whether it be the management or the employees, investors do not look on it with favor.

The Regulatory Aspect

Sometimes one hears a utility executive say, "We can run our business without regard to regulation; regulation is only an annoyance and hindrance." Bad regulation may be just that. However, regulation is just as much a necessity to the industry as management because of the industry's monopolistic nature for its own products. It is better for investors to hear that management recognizes this fact and

makes an effort to get along and keep in close touch with regulation, whether or not there is a rate case in progress.

Regulation holds the final determination, except for the courts, as to how much a company may earn. Thus, it is one of the most important problems facing management, and investors are anxious that utility management strengthen its relationship with the regulatory commissions.

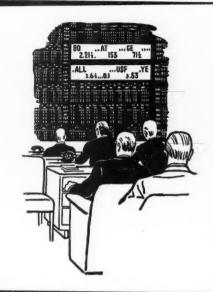
I have already indicated the importance of regulation and its place inside of our hypothetical "triangle." The regulator has as much of an obligation as management to accord fair treatment to consumers and investors.

Investors will not assume that they can depend on the courts to obtain fair treatment. When courts have to be resorted to, the time element alone is often so extended that losses become irreparable. The courts are truly outside the triangle. They generally afford protection only against legal abuses and clearly proven "confiscation." Protection against these does not in any sense add up to an assurance of economic welfare. That is something which is squarely up to the regulatory body exercising original jurisdiction over company operations.

Investors perhaps have an easier time in evaluating the fairness and quality of regulation than in appraising management, because any shortcomings along this line are revealed in regulatory decisions. Investors naturally note carefully the composition of the rate base and the level of the rate of return used. However, they will scrutinize the regulatory authority much more carefully than just the mere "end result"—which is often the limit of appellate court supervision of regulatory

The Investors' Position

**FINANCIAL policy may be considered most important to the investors... investors expect management to understand their position. They rightly expect a gradual increase in earnings and dividends for the common stock and a recognition of the impact of inflation. For capital industry such as public utilities, however, financial policy means much more than that. Perhaps the two most important general considerations along this line are debt ratio and dividend pay-out."



action. Investors wish to know the whys and wherefores.

As to the commission and staff itself, some of the questions investors are interested in are as follows:

Is the commission elected or appointed? (Naturally the latter is preferred.)

Is their term of office sufficiently long to avoid too rapid a turnover in the commission?

Are the expiration of their terms staggered so as to aid continuity?

What is the background of the commissioners?

Is the staff sufficiently large, and adequately trained?

Is the pay level of the staff and commissioners in accord with the great responsibility which they carry?

Is the staff under civil service?

NEXT, as to the *general* policies of regulators, investors will consider the following questions:

Do the regulators indicate clearly that they have an obligation to protect the investors as well as the consumers? Do they seem to resolve all questions in favor of the consumers and against the investors?

Do they understand the economic principles of the utility industry and the logical type of rate base, from an economic as distinguished from a purely legalistic point of view?

Do they recognize that the investors assume *all* the economic risk? (In other words, regulation can limit earnings, but it cannot improve earnings if the business becomes economically unprofitable.)

Do they recognize that while an industry may look at times to be very profitable, there are inherent unforeseen difficulties that practically all companies eventually

encounter which will mean losses to investors?

Do they recognize the different risks inherent in the different types of utility business, such as water, electric, natural gas, telephone, manufactured gas, and transit? (From the investor's point of view there is a marked distinction between companies in the various fields, as well as between companies within each field. This has an important effect on the type of capitalization appropriate for a particular type of company and also the fair return. There seems to be an unfortunate tendency in some regulatory quarters to apply apparently similar treatment to the different types of companies.)

Have they recognized the adverse effect of inflation on investors?

Do they consider the need for a higher depreciation allowance, because of the present-day higher cost of replacement of equipment?

Have they thought about the justification of some allowance for depreciation reserve in setting the fair rate of return?

Have they considered fair treatment to investors in decisions regarding accelerated depreciation?

Do they take the position that past ability to raise capital is, in itself, proof of a fair return? (Clearly, this is no evidence whatever of present fair return.)

Do they give adequate leeway to management to make managerial decisions?

Do they try to force unsound financial policies on management?

Do they understand that basically it is the economic character of the industry that determines the extent of the fair return, and not the way the capitalization pie is divided? Do they recognize the errors of rate case opposition witnesses who favor a high debt ratio without any additional earnings on the common to compensate for the added risk due to the higher debt?

Do they realize the dangers to the consumers, as well as to the investors, of unsound financial policies advocated by witnesses who favor too high debt?

Do they give prompt rate relief where it is obviously justified?

Do they take a practicable business approach to a rate case or do they follow a rigid mathematical and legalistic formula without sufficient leeway to indicate the use of judgment?

Do they actually recognize the many reasons why a fair rate of return must be in excess of bare cost of capital?

Do they recognize the need for more earnings in good times to compensate for a lower rate of return during adverse circumstances?

Do they consider future earnings prospects and future capital outlays in making their rate case decisions?

Do they include an adequate allowance for working capital in rate base?

Do they misuse earnings-price ratios in determining cost of capital—either by using spot figures or by failing to realize that investors consider future earnings? (The Colorado Interstate Gas Company and Northern Natural Gas Company cases decided in 1952 by the Federal Power Commission were examples of how investors feel that regulation errs in this regard.)

Do they recognize that common stocks should sell at a satisfactory amount above book value?

Do they recognize that there should be

INVESTORS' VIEW OF MANAGEMENT AND REGULATION

an adequate earnings on the common so as to permit a gradual increase in earnings per share and dividends?

Do they show proper discrimination in their evaluation of the expertness of witnesses?

Do they show some recognition for accomplishments of good management?

Do they accept the need for a company to keep in regular contact with them, even though no rate case is involved, or do they tend to make such a procedure difficult for the company to carry out?

Have they ever appeared before the Analysts Society to explain their methods of regulation?

THE electric industry has succeeded in appealing to the investors in recent vears in spite of unfavorable regulation in some sections of the country. That is because of certain presently inherent favorable characteristics of the industry. What will happen to the industry if these favorable characteristics should be lost? Regulation may not have been entirely responsible for the plight of the transit and manufactured gas industries. However, some of their difficulties might have been eased or avoided if these industries had been given the relief at the time they needed it. The telephone industry certainly needs more relief today than it has received. The electric industry, to the extent that it has even sought increases, has not received as prompt relief as it should have in many instances. Some companies are today earning such a low return that investors are highly critical of them.

When we observe what *investors* have received in recent years in the utility field in relation to how well the *consumers* have been treated, and in relation to other costs going into utility service, we may well wonder why such companies encounter trouble in trying to get satisfactory rate increases. A mere glance at basic statistics of the electric industry brings out the story vividly. Wages and coal costs have gone up along with the general price level. Yet the proportionate share going to the investor has decreased! The low cost of utility service has been the bright spot in the inflation picture as far as the consumers are concerned. Can anyone blame the investors for questioning why some regulatory authorities show a reluctance to increase rates?

W нат I have said may sound as though I am being critical of regulation. This is not true. Under present conditions, I am thoroughly convinced that it takes outstanding statesmanship on the part of regulators to do a fair job. Those words "outstanding statesmanship" deserve underlining. I have a great deal of solicitude for regulators. I think they have an extremely difficult task to perform. No matter what they do, someone is going to tell them that they are all wrong. Furthermore, they are overworked and have many problems to solve than the proper rate of return allowances. Unfortunately, they are often either directly or indirectly subject to political pressure.

The analysts know that the size of the staffs and pay of regulatory authorities have definitely not kept pace with the importance of their position. They are responsible for the economic well-being of one of the largest segments of our private industry. The job calls for well-trained men with excellent business judgment. The various states and the federal government have been seriously negligent in

not providing adequate pay in order to compensate the caliber of men required. There are many top men in regulation today who are worth much more than they are being paid. If they left this field, it would be a serious loss to the industry, its owners, and its consumers.

REGULATION has its part to play in the battle of private companies versus government power. Headlines pertaining to rate increases often sound as though the customers were being unfairly treated. They obviously hurt the privately owned company. Regulation also has an obligation to our economic system to avoid procedures which will result in stirring up the consumers unfairly.

I believe it would be correct to say, in summary, that investors may classify regulators into three different groups:

1. Those who take a truly statesmanlike view of their job, who handle their assignments with broad judgment, and who are sincerely striving to be fair to both consumers and investors without regard to any pressures. A commissioner who follows such a policy could shift from regulation to an executive position of a utility company and still treat all parties fairly without having to change his way of thinking. This is a theoretical ideal and, of course, the reverse should be true. A management official should be able to shift to the job of a regulator without having to make a fundamental change in his thinking.

2. Those who do a sincere and honest job, but tend to resolve all borderline questions in favor of the consumers, and use too strict a mathematical approach without practical judgment. 3. Those who are swayed primarily by political considerations. Regulation in no way should be a political issue. It calls for nonpolitical decisions just as those exemplified by our best courts. It is too vital a matter to our system of private capital to permit it to become a political football.

Conclusion

BOTH management and the regulators may feel that investors are unfair or inept in their appraisals. Certainly, I have never heard investors say that they have the answer as to how to make an exact appraisal or vigorously defend their views on various items that they feel are important. Obviously, achieved perfection is not to be expected. However, I do feel that good management and regulation will not go unrecognized, and poor management and regulation will find it hard to cover up their failings.

Above all, I have not intended to criticize management or regulation. The utility industry, today, contains as conscientious and hard-working management officials as are to be found in any industry. And I am very mindful of the difficult job handled by the regulatory officials, and how many of these are true statesmen in their field. I merely make this comment with reference to the fact that the job to be done is not human but superhuman. The industry is on the firing line in the battle of Private Capital versus Socialism.

We all should be, and I am sure most of us try to be, dedicated to preserving our way of economic life to the benefit of all concerned—the consumers, the investors (savers), and the employees, who are all one and the same group in our country.

Telling the Story of Employee Benefits

Now and then we hear actual stories of working people who get into debt and other difficulties in order to take care of troubles which they did not know or realize were provided for under benefits made available by their employers. Utility management is faced with a practical problem of telling the employee, as well as others, what these benefits are and how they can be obtained.

By S. F. LEAHY*

A MAJOR social phenomenon of our times has been the steady growth of employee benefits in industry. Part of this growth has been competitive —a gain in one industry kicks off gains for workers in other industries. Another part of the growth reflects good business sense and management empathy for employee needs. We can be sure that benefits are here to stay and that they will continue to cost money—probably even more money.

Benefits in 1954 cost Detroit Edison \$12,700,000, which is about 56 cents an hour per employee. Improvements on various plans in 1955 brought these respective figures to \$13,200,000 and 58.5 cents an hour.

Like other companies, we have found that it is not enough to set up sound benefits for employees. An intangible but important part of their value is dissipated if the workers fail to understand what they have, or if in time they say "So what?" and forget all about them.

For instance, we have found that some employees did not realize that minor surgery performed in a doctor's office was covered by our hospitalization plan. It has also been apparent that some employees

*Manager, employee relations, The Detroit Edison Company. For additional personal note, see "Pages with the Editors."



judged the quality of benefits by comparing a particular feature with some more liberal practice in another company, instead of comparing all benefits at once. We have had the feeling that soon after any benefit plan received publicity it was accepted and forgotten, or at least disregarded. There was also the impression that employees had only a vague idea of how much the company put into benefits and just how the economics of benefits tied in with the need for good work and high productivity.

As is the practice in industry, we have always tried to "do something" about keeping our employees informed concerning benefits. We have issued booklets on individual plans, talked to supervisors, published articles in our employee magazine, Synchroscope. In 1950 when we were ready to make substantial changes in our disability benefit plans, we held companywide meetings with supervisors and let every employee vote on several possible ways the plans could be changed. (The vote clearly showed the sort of change the majority wanted.)

But in 1955 when further improvements were made in some of our benefits we decided to take an extra good look at what we were and what we had been doing along the communication line. We saw that we had done a pretty good job (at least from our viewpoint), but that there were surely a few questions that we could ask ourselves:

(1) Every employee had received benefit booklets of various shapes and sizes. Each cover reflected the individuality of the artist who had happened to make the layout. Where was this collection of booklets today?

Casual questions and our own common sense told us that few employees kept them in a folder or family strongbox. They were apparently scattered in drawers and on shelves around the house. Many had probably been thrown out whenever a family put on a house-cleaning drive.

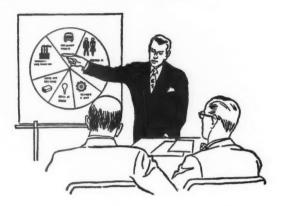
(2) At one time or another just about every benefit plan had been described in a Synchroscope article. Had these articles been published regularly and according to a plan? No, they had appeared infrequently—really when we on the management side had felt special interest in the features of a particular benefit.

Had we relaxed our concern about employee understanding after publication? Yes, by and large, we had. Once the facts were published, that was that. Managements often feel that once a thing is spoken or written it is communicated for all time.

ADMITTING that benefit articles had appeared somewhat spasmodically over the years, could this be explained or justified? Yes, it appeared that we had often hesitated to publish articles about benefits because (a) the details were complex and hard to treat in limited space; (b) this made it harder to reach agreement with those in our organization who were expert in the fine-print aspects of the plans. There had been delays, too, because (c) we had hesitated to seem to be pushing out too many benefit articles and in some way overdoing it.

Stopping to ask "what" and "why" had the usual good effect.

We saw that we could do something about all those benefit booklets. Their contents have now been brought up to date and are being distributed to employees in an attractive loose-leaf "Handbook for



The Spread of Employee Benefits

Amajor social phenomenon of our times has been the steady growth of employee benefits in industry. Part of this growth has been competitive—a gain in one industry kicks off gains for workers in other industries. Another part of the growth reflects good business sense and management empathy for employee needs. We can be sure that benefits are here to stay and that they will continue to cost money—probably even more money."

Edison People." Future changes will be very economical. We will be able to send out just those sheets that carry alterations, rather than entire new booklets. All sheets are punched for a 16-prong plastic binder that is easily taken apart. In sending out revised sheets we will emphasize the importance of taking out the old pages and inserting the replacements as soon as they arrive.

All the information about company rules, services, clubs, proposal plan, benefit plans, social security, complaint procedure, etc., will be in one handy reference book in each Edison household. Supervisors will have an extra copy to keep handy on the job.

Last fall we also decided to start making a deliberate effort to write simply and regularly about company benefits in our employee magazine. To start it off in a big way we devoted the first 24 pages of our 32-page October Synchroscope to the broad treatment. And early in 1956 we began a monthly series of two-page articles on each benefit plan in turn. In all of this we have tried to keep the material brief, visually attractive. We have used simple charts and other devices for getting ideas across, aware of the competition for an employee's attention once he gets home.

Editorially, we directed the 24-page treatment in the October issue to Edison wives to dramatize the fact that benefits

concern the welfare of the entire family. Each spread carried the slogan, "It's Smart to Know His Company." We invited six wives to come in to look at our rough layouts and to read the copy. We photographed them as they sat in a conference room with the layouts and proofs talking to our executive vice president, Charles R. Landrigan. This made a good cover photo for the issue.

Under "Going with a Growing Company" we pointed out an employee's opportunities—the history of promotions and transfers . . . technological improvements . . . training opportunities.

Under "It's Nice to Be Needed" we showed how steady our employment had been despite the ups and downs of manufacturing employment in the Detroit metropolitan area. We boxed some capsule information about average income, home ownership, marriage and children, length of employment, stock ownership.

Then we said "Let's Take a Look at Wages" and showed Federal Reserve figures on what various kinds of employed Americans were earning. We outlined some of our liberal pay practices, explained how through job evaluation and other efforts employees are paid equitably for the kind of work they do.

We included a spread on recreation and safety, showing the descending accident curve and mentioning in passing that an employee is actually safer on the job than at home.

Then we went on with our hospitalization plan, pay during absence and extended disability, life insurance, retirement plan.

The last page of the section was a statement from our president, Walker

Cisler (with a candid close-up of him rather than an "official" photograph). After alluding to the caliber of Edison men and women and the plus values of employment, he told just how much benefits cost the company and pointed out that they would cost the individual more to "buy them on the outside."

He concluded:

It feels good to be part of a company that can offer fine benefits. But to be able to do so, a company must be in good running order, doing a good job for the customer, and giving a fair return to its shareholders. With rising costs in a growing company this can be a rough job, requiring everyone's cooperation and effective work, with plenty of ideas for further improvement in our methods. We must do it together all along the line. Only a really successful company is a good place to work.

I THINK this summarizes pretty clearly the basic message we are trying to get across. Benefits are fine things. They cost money. Good work and improving methods keep a company successful—the kind of place where an employee would certainly prefer to work. We would like him to realize that he has a real stake in the effective operation of the company.

In the March Synchroscope, furthermore, we summarized in eight pages a talk by Mr. Cisler before one of our large employee clubs on the progress we were making in all the human and technical aspects of doing business. We know, of course, that we did not get 100 per cent readership on this 8-page article, but we have reason to believe that it was pretty high. Our employees have come to expect rather good

TELLING THE STORY OF EMPLOYEE BENEFITS

reading about serious topics in their magazine. The staff usually uses plenty of photographs and art work to communicate abstract ideas, putting events in terms of people working at all levels in our organization.

I NCIDENTALLY, we made an informal survey in several departments after the 24-page treatment on benefits in that October issue. We found that 83 per cent of the respondents said they read it and 61 per cent of their families read it, too. Half of them said that they learned that the benefits were a little better or much better than they had thought. About 73 per cent

said they found the extended treatment worth while or very worth while.

Here is a typical comment:

This special issue told me things I didn't know before. My wife thought it very worth while. (She always reads Synchroscope.) No suggestions because we feel you are doing a swell job.

Although we naturally like to get comments like this, there is one word in it that is much more important than the bouquet. The word is "we." If husbands and wives are beginning to think *together* about their stake in Detroit Edison, we are getting somewhere.

A Plea for Partnership Policy

CONFESS that I am a bit confused when the opponents of the partnership principle of developing our water resources contend that this is a natural resource that should not be touched by our free enterprise system.

"I fail to understand why it is wrong to permit private enterprise, under fair regulation, to manufacture electricity from falling water. If this is wrong, then it must be similarly wrong for private enterprise to use coal or oil or atomic energy to manufacture electricity, for all of these are also natural resources.

"If to generate electricity from natural resources by private enterprise is wrong, then isn't it equally wrong to permit private enterprise to cut trees for lumber, mine minerals, or even use the soil to grow crops?

"Is there something separate and peculiar about our water resources that justifies the application of a basically different set of rules and principles to their development than is applicable to our other natural resources?

"I cannot satisfy myself that this is the case. I strongly believe that it is equally proper for local enterprise—public and private to participate fully in the development of all our natural resources under fair and proper regulations.

"The record of partnership in natural resource development is long and it is successful. It deserves more extended application rather than less."

—Honorable Craig Hosmer, U. S. Representative from California.



Let's Get to Know Each Other

There is no question about the fact that professors far removed from the actuality of business should get together with businessmen. This article might give some of the professors and businessmen an idea. It outlines a practical approach which many professors and utility management have actually used in reaching common ground and better understanding of each other's point of view.

By JOHN D. GARWOOD*

In the orbit of economics the world of fact as represented by the American businessman and the world of theory as represented by the academician of college and university economics departments have oftentimes been at odds. This is not to say that the end product of each group's thinking is at variance. It is not.

The economist in his calculations postulates what businessmen take as given; i.e., a capitalistic economy depends upon healthy, dynamically expanding units to maximize the nation's welfare. The "rules of the game" are laid down by the government which in turn represents many interests. Presumably, the government will resolve equitably the multiple interests of the consumers, workers, investors, and competing business units.

It is the task of the economic academician to assist in government policy formulation in that it is he who establishes the issues in the classroom for those who later will be occupied in government value judgments. In addition, it is not unusual for government to seek the counsel of the economist. Likewise, business may seek the company of the economist to find out what the government is up to.

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The Gap between Theory and Practice

ALTHOUGH the businessman as the practitioner of the economy and the economist as the theoretician of that same economy proclaim the merits of Capitalism, yet the gap between the thinking of many American businessmen and economists in the academic field is one which has grown wider in the last two decades. This is not to say that prior to that time

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LET'S GET TO KNOW EACH OTHER

economics practice and theory always followed the same line of thought. They did not. The twentieth century has witnessed an increasingly large number of economists who have made critical appraisals of the "economy in operation."

The so-called "Institutionalist School" of economics produced men such as Thorstein Veblen, John R. Commons, and Gardiner Means, who early in the century pointed up what they considered to be inequities and harmful effects of the American free enterprise system.

In the 1930's the concepts of John Maynard Keynes, which seem to some business leaders to be anathema to the free enterprise system, swept through the economic world of theory and textbook with lasting results. For many of the younger economists it was love at first sight; for some of their older brothers the period of infatuation lasted many years.

THUS, to many a businessman the economics teacher seems often to be on the other side of the fence. Under our economic system of free enterprise and private property, it is difficult for many people in the business world to understand influential members of society who may express little or no concern about high taxes, the national debt, and increased governmental spending.

On the other hand, some academic economists are of the opinion that the man of business has failed to recognize social and economic changes which have come to pass in the last few decades in this country.

There is no area in economics where it is more essential that the theoretician and the practitioner come to understand one another than in the field undertaken by

public utilities. It is here that we find government control, intervention, and ofttimes outright government ownership. Niagara Falls, Dixon-Yates rejection, Eisenhower partnership program, etc., attest to the direction of the rules of the game.

A College Administrators' Conference

THE Southwestern Bell Telephone Company, a utility with assets approaching a billion and a half dollars (a company operating in the states of Kansas, Oklahoma, Texas, Missouri, and Arkansas), made a step in the right direction in March, 1956, when a statewide College Administrators' Conference was initiated in Topeka, Kansas. The fourteen conferees came from the twelve largest colleges and universities of the state. (The writer was one of the fourteen conferees.)

Warren S. Miller, general manager of the Kansas area, noted the purposes of the conference as four in number:

a. To close the historic gap between businessmen and educators, a gap existing because businessmen historically have thought in terms of profits, educators in terms of ideas.

b. To discuss matters in which we are both deeply interested. The leadership in business and in education springs from the same philosophic roots; *i.e.*, we are both deeply concerned as to how our economy functions for the public good.

c. To give educators some helpful

¹ Colleges and universities included University of Kansas, Kansas State College, Fort Hays Kansas State College, Kansas State Teachers College at Emporia, Kansas State Teachers College at Pittsburg, Baker University, University of Wichita, Mc-Pherson College, Washburn University, St. Benedict's, Friends University, and Ottawa University.

"In the orbit of economics the world of fact as represented by the American businessman and the world of theory as represented by the academician of college and university economics departments have oftentimes been at odds. This is not to say that the end product of each group's thinking is at variance. It is not. The economist in his calculations postulates what businessmen take as given; I. E., a capitalistic economy depends upon healthy, dynamically expanding units to maximize the nation's welfare. The 'rules of the game' are laid down by the government which in turn represents many interests."

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facts about business; i.e., to see first-hand how companies operate.

d. To learn your comments and thoughts. They may make us "reach for leather but I only hope they don't unhorse us."

WE fourteen teachers of economics met with eleven representatives from Southwestern Bell. We sat around a conference table and company executives explained how the company operates. The areas for discussion included the organization of the telephone industry and the economics of business, personnel policies and objectives, problems of regulation, service objectives and means of accomplishing them, accounting, plant installation and maintenance, engineering, forecasting growth and service, and public relations.

We listened carefully. We asked questions. We made notes. We filed material given us for future reference. We talked about it during lunch and dinner and during the evening. We saw the telephone facilities and potential.

Is such a program worth while; *i.e.*, does it accomplish its purpose of giving the teacher of economics and business sub-

jects a "feel" of business and an understanding of how leaders of public utilities react to a certain situation? My answer is yes. Few would doubt that both groups have a common interest. If reasonable and prudent men can meet, exchange views, see one another, it would seem that such a meeting must have salutary results.

The teacher is in no position to invite business to the campus; he has no expense account. The initiative must rest with business.

The Strategic Position of the Teacher of Economics

THE position occupied by the teacher of economics in a college curriculum is not always recognized by the layman. No other teacher on a college level has more influence on a nation's socioeconomic philosophy than does the teacher of economics. The value judgments of this philosophy affect every segment of the economy.

Other fields of study in the college are designed primarily to make the individual a skilled craftsman; *i.e.*, an engineer, a dentist, a doctor of medicine, a lawyer, a history teacher. The student studies Eng-

LET'S GET TO KNOW EACH OTHER

lish to improve his powers of communication and to prevent him from splitting his infinitives and dangling his participles. From the cultural and background point of view he may study the early Greek, or Latin, or Dickens, or the siege of Richmond.

From the blackboards in the economic classes come concepts in taxation, public utilities, money and banking, labor, public finance, investments, etc. Should the government take over the communication industries as in Europe? Who should own the electric-generating plants in the U. S.—private or public? Is the tax program equitable? Should business be singled out for particular taxation, if so at what rates? How about labor and business—what frame of reference should the government provide for this relationship?

These are policy questions and, through the media of textbooks and the instructors, questions are posed and answers sought. These are \$64,000 questions. It has been the experience of the writer that 70-80 per cent of the students assume the opinion of the instructor on controversial questions.

Our young people then leave school, become voters, consumers, workers, investors, executives in our economy. Most teachers like to think they leave an indelible mark on their students. The mark of the teacher of economics is apt to be deep.

M ost teachers in economics unfortunately have little business background. They are likely to appear in the classroom wearing the PhD trappings but no practical experience. It has been the ex-

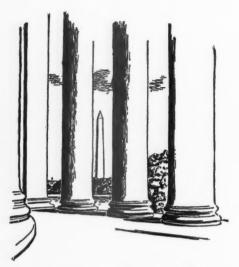
perience of the writer that the typical college teacher is an affable, open-minded, mild-mannered sort of a fellow. If he draws conclusions in his classes which are adverse to the community of business interests, the chances are that based on his information, these conclusions are logically justifiable.

By the same token, in many instances business fails to understand the campus professorial problems. The writer recently heard an executive high in business circles, a man on a university board, smilingly accuse a group of academicians of toiling only twelve to fifteen hours per week (this being the number of hours spent in class per week). Statements like this indicate a complete lack of any comprehension of the work of the teacher. In many institutions classroom appearances are only incidental to the many other functions performed - research, administration, preparation for classes, student advising, etc.

Conclusion

THE conference sponsored by Southwestern Bell is one which might well be emulated by other public utility companies with salutary results. The teacher of economics in the U. S. today unlocks the door to many socioeconomic controversial issues.

The chances are that his is a textbook knowledge. He would welcome an opportunity to meet with utility representatives, discuss mutual interests, examine one another's problems. No other teacher on the college staff wields the ultimate farreaching effect, policywise, as does the teacher in economics today.



Washington and the Utilities

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Pressure on Power Bills

As Congress goes into the stretch for ending the session before the national party conventions, pressure is mounting to bring out government power bills involving authority to construct federal dams. The pressure is chiefly Democratic, with National Democratic Chairman Butler calling the signals on what is apparently a party line to build up the government power issue for campaign purposes.

But the impact on key Congressmen of Republican persuasion has left the fate of several of these measures in doubt. Prior to the death of Senator Barkley (Democrat, Kentucky), the Hell's Canyon dam had been blocked in the Senate Interior Affairs Committee, reputedly by virtue of bipartisan opposition, which included Senator Long (Democrat, Louisiana). With Long moving over onto the Senate Finance Committee, the government power bloc finally broke the dead-lock.

One meeting of the Senate Interior Affairs Committee had been scheduled for June 14th. But so many Senators were out of town on that date that the hearings were put over and action was deferred.

But in a subsequent meeting on June 19th, the bill was voted out by a strictly party voice vote.

Over on the House side, where the Hell's Canyon bill has been similarly dormant, one committee vote was delayed by lack of a quorum.

The squeeze on Republicans has taken the form of proposed compromise agreements whereby Hell's Canyon and the Niagara river development bill (already passed by the Senate) would be freed for floor action in return for Democratic clearance for projects favored by Republican Congressmen badly in need of campaign material themselves. Such is Representative Chenoweth (Republican, Colorado), a member of the House Interior and Insular Affairs Committee, who has apparently won House Speaker Rayburn's clearance for floor action on the \$156,-000,000 Fryingpan-Arkansas development in southeastern Colorado.

THE recent catastrophic rock slide at Niagara gorge, which wiped out two-thirds of the Schoellkopf station of the Niagara Mohawk Power Corporation,

WASHINGTON AND THE UTILITIES

has added to the complications. Favorable action by the House Public Works Committee on some form of Senate-approved state-development Niagara project legislation could conceivably result from bipartisan bargaining in that quarter.

HE formation by the Democratic National Committee of a special group to press "give-away" charges is another sign of the faith some party strategists still place in the resources issue. Democratic National Chairman Butler has already announced that former Interior Secretary Chapman would head a special advisory committee of "outstanding experts" which will draft the party election year strategy aimed to discredit administration resources policy. Whether this committee is allowed to launch a continuing fullscale attack along lines proposed by Butler to the effect that the administration is dominated by the electric companies may not be fully determined, however, until after the Democratic convention.

Choice of the presidential candidate could make some difference in the stress the party may place on these matters. Adlai Stevenson, the front runner for the nomination, has shown little enthusiasm for making a major issue out of government power developments. Recent opinion polls indicate even less popular interest in the subject compared with other issues.

The majority report of the House Government Operations Committee criticizing administration power policies and officials was hardly unexpected. The 250-page document, approved by the full committee majority and assailed by Republican members, had already gained widespread informal publicity when its contents were leaked to the press as a "subcommittee staff study." In general, it charged the administration with attempting to destroy

government power and to establish "a complete private power monopoly."

This double-mileage publicity of the report, which was labeled by the minority as little more than a campaign document, prompted the minority to point out and attack the "shocking misuse of congressional prerogatives and functions for partisan purposes." It said that the primary purpose of government power advocates on the committee was to create a "textbook for Socialism" which they can be expected to quote again and again to support government power causes damaging to "private enterprise and the administration alike."

The majority report was virtually devoted entirely to the political aspects of the government power issue, although titled "Effect of Department of Interior and REA Policies on Public Power Preference Customers." It cited many alleged abuses which the minority said were "not supported by the facts" as revealed in last year's subcommittee hearings.

The only Democratic dissent came from Representative Fascell (Democrat, Florida), who stated in supplementary views that it was "ridiculous to assume" that electric companies should not try to make the best possible deal in government power transmission negotiations with co-operatives and other public groups. He said that the companies should have a chance to be heard by Congress.

Other Bills

ACTION is near in congressional committees on various legislation to encourage nuclear power development. The Joint Committee on Atomic Energy held a final day of hearings on bills (S 3929, drafted by the committee staff, and HR 11242, based on recommendations of the AEC) providing for third-party indem-

nity against reactor hazards. Shortly thereafter, the committee probably will consider in executive session the Gore Bill (S 2725) for construction of six federal atomic power plants.

In other developments, the Senate Interstate Commerce Committee approved a revised version of the Potter-Pastore Bill (S 2643) to speed private nuclear power development by exempting utility and other companies jointly participating in these atomic power projects from regulation under the Holding Company Act in specified circumstances. Earlier provisions of the bill, which would also have exempted utilities engaged in joint hydro projects, have been dropped.

The Senate Interior Committee may yet approve a bill (S 863) to require federal agencies to adhere to state water laws in the 17 western states. The Justice Department has modified its previously expressed opposition to the bill, which is inspired in large part by the U. S. Supreme Court decision in the Pelton dam case, but said that the best approach to ending clashes between state and federal governments over water usage would be through regional interagency committee studies, as proposed by the Presidential Advisory Committee on Water Policy.

THE Senate passage of the Public Works Appropriations Bill (HR 11319) will lead to a House-Senate conference to resolve differences in the amounts allocated to the U. S. Bureau of Reclamation and Army Engineers' civil functions. The Senate Appropriations Committee last month approved sums set by the House for Southwestern Power Administration, Southeastern Power Administration, Bonneville Power Administration, and the Tennessee Valley Authority. The Senate committee again disagreed, however, with House committee

language giving TVA blank-check authority to use its operating revenues to expand existing steam plants. Its report called the House policy "unwise" and urged "the appropriate legislative committee" to clarify the situation before the next TVA appropriation request is submitted to Congress. So long as TVA is permitted to add new units at existing plants, it said, "Congress cannot authorize a new plant... without losing all control over its continuing expansion."

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This statement, in effect, leaves it up to the House and Senate Public Works committees to decide whether the Government Corporations Control Act of 1948 can be properly interpreted to permit TVA to use operating revenues, unchecked by congressional controls. Senate Appropriations Committee action increased the Reclamation Bureau funds by \$13,000,000, including an added \$7,000,000 for a start on the Upper Colorado water storage and power project. The committee also upped funds considerably for Army Engineers' construction of seven power-producing projects.

The Gas Lobby

HAIRMAN John L. McClellan (Democrat, Arkansas) of the special Senate committee investigating lobbying in connection with the vetoed Harris-Fulbright Bill on natural gas, got his hearings off to a snappy start on June 14th. Before examining the first witness, McClellan said that his group would investigate eight national organizations, including the Committee for Pipeline Companies and the United Auto Workers (AFL-CIO). He added that this selection "does not imply or indicate at this time that their activities were in any way illegal or improper." They were picked because they are "among the most active" of a number of

WASHINGTON AND THE UTILITIES

groups and apparently they spent the most money.

All eight are registered under the Lobbying Act. Four opposed the recently vetoed natural gas bill and four supported it. McClellan said public hearings would be held June 14th and 15th and on June 21st and 22nd. Other organizations listed by McClellan are the Council of Local Gas Companies, Mid-Continent Oil and Gas Association, Natural Gas and Oil Resources Committee, Joint Committee of Consumers and Small Producers, the Mayors' Committee on Natural Gas, and the National Institute of Municipal Law Officers.

The Senator renewed his appeal for members of Congress, the press and radio, and the general public to furnish any available information about improper lobbying activities. He said he wants "facts" since "innuendoes, inferences, and rumors are of little or no value." So far, he said, only forty-three Senators had replied to his March 19th request for any facts they have on improper lobbying activities. Of these, he said, "only three or four have reported or suggested any facts or information." He said the staff was looking over 1,100 reports filed quarterly by registered lobbying organizations, but it obviously is "impossible" to investigate each one.

M CCOLLUM said Congress should do all in its power to "encourage, rather than discourage," educational programs like the one conducted by the group he heads. "We expect to continue such a program," he said. McCollum gave the Senate committee the minutes of his group's first meeting. It stated that "under no circumstances will the committee engage in any activities which constitute lobbying. McCollum said the 1,259 con-

tributors who financed the group's operations "were assured that their funds would not be used for lobbying."

Baird H. Markham, executive director of the committee, conceded under questioning that the \$1,752,513 did not represent the total amount expended by the oil industry in the information campaign. In addition, Markham said, oil companies contributed the services of about three thousand persons to work on regional and local committees. McCollum said it would be impossible to estimate the cost of these services. The persons, he said, performed work for the Natural Gas and Oil Resources Committee in addition to their regular duties for the oil companies.

HE natural gas industry and Congress can forget future legislation to limit Federal Power Commission regulation of producers, if the public is adequately informed of regulatory pitfalls, according to Paul Kayser, president of El Paso Natural Gas Company. Kayser told Chairman McClellan, in testimony last month, that it was all right with him if Congress did not pursue natural gas legislation any further. The El Paso president, whose company has production properties, was a member of the original industry group which set up the Natural Gas and Oil Resources Committee, an organization formed in October, 1954, with \$1,753,000 contributed by oil and gas companies for an "educational campaign." He told the committee that if the Natural Gas and Oil Resources Committee is successful in making the public aware that some incentive has to be provided for the risks of exploring for adequate supplies of natural gas, the industry can accomplish all its objectives without any congressional action.



The Telephone and Civil Defense

CHARACTERIZING the telephone system as the "backbone" of civil defense emergency communications in the event of H-bomb attacks, Lieutenant General C. R. Huebner warned the telephone industry last month of the tremendous problems to be faced in support areas of the target cities.

In an address before members of the New York State Telephone Association, at Schroon Lake, New York, the director of the New York State Civil Defense Commission emphasized that every telephone company in the Empire state was involved in "the emergency problems in support areas." He reviewed the progress made in New York state civil defense in overcoming technical problems of communities with the assistance of telephone engineers throughout the state. General Huebner then stressed that because of the development of the enemy's H-bomb weapons, the "resultant radioactive fallout properties (from multiple bombings) can have a devastating effect on the countryside for thousands of square miles."

The state civil defense director expressed confidence that the telephone industry—by working with the civil defense organizations—would overcome many

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problems facing it in the event of H-bomb attacks.

General Huebner administered the oath of office for duty as a telephone consultant on the New York State Civil Defense Commission's staff to Hamilton Cunningham, executive secretary of the telephone association. Prior to this brief ceremony, the state civil defense director said that two officials of the New York Telephone Company are permanent members of his staff. Because this arrangement had worked out so well, General Huebner expressed his conviction that it would be mutually beneficial to provide for similar close contact with the independent telephone companies in New York state.

THE representatives of the independent telephone companies at their annual convention were told by General Huebner that their industry in the state was unsurpassed in furthering the interests of civil defense.

"You know as well as I do that without dependable communications civil defense simply cannot function," he asserted.

Although telephone companies' responsibilities in the target cities remain undiminished, they now have equal responsibilities in smaller cities and rural communities. General Huebner attributed this

TELEPHONE AND TELEGRAPH

additional burden to the improvement of modern weapons. He devoted his talk to the tremendous problems for the telephone companies in the support areas, asserting that only advance planning and co-operation with civil defense officials would result in the emergency situation being "manageable" in the telephone companies' respective communities.

The state civil defense director granted that civil defense cannot prevent enemy attack, but he informed his audience that it could make its effects more tolerable.

Independent Telephone Trends —Wall Street Journal

The number of independent (non-Bell) telephone company stations is growing rapidly. But the number of individual companies which formally supply telephone service is dropping, due to consolidations, mergers, and sales needed to bring such operations into conformity with subscriber demands for modern-type service. Such are the conclusions reached in a front-page story in the June 14th issue of *The Wall Street Journal*, signed by Carter Henderson.

Henderson outlined the problem facing the typical small company operator in obtaining financing. The availability of REA loans and the merger with other companies into larger and stronger organizations are the two alternatives mostly used by the independents, according to Henderson. He says that the independent telephone industry is far from any "minor league business." They own 8,460,000 telephones (compared with 46,218,000 in the Bell system), or more than all the telephones in Great Britain and France put together. They operate exchanges in all states except Delaware, representing an investment of \$2,042,822, which brought in 1955 revenues of \$596,030,000.

Through its national association — the United States Independent Telephone Association—the industry has been pursuing an aggressive publicity campaign costing \$245,000 a year to acquaint the general public with the existence and virtues of the independent company operations.

GIVING the reasons for the independent company's growth, The Wall Street Journal traces it back to the time when the Bell system companies concentrated on the populated cities, leaving the less profitable rural regions to the independents. Commenting on the present-day situation, Mr. Henderson says:

For decades, the independents—that presently provide telephone service to about two-thirds of the nation's geographical area - had their growth stunted by the farm areas' leisurely development. But since the post-World War II trek to the suburbs, the business of these often weakly financed companies has mushroomed and they have found themselves suddenly confronted by an unprecedented clamor not only for more telephones, but for modern dial phones that cost three or four times as much to install as the oldfashioned magneto or battery instruments that still serve some 40 per cent of all independent subscribers.

It's the independent telephone companies' inability to scare up fresh funds to meet this double-edged demand that's forced hundreds of them to lose their corporate identities by selling out, merging with financially stronger neighboring exchanges, and, occasionally, even dumping their ailing phone systems into the laps of state public service commissions.

As a last resort, Henderson said state public service commissions may even or-

der local Bell system companies to buy out ailing independent properties. Between 1940 and the start of this year, the Bell system has bought up 107 independents with 82,677 telephones.

But the Bell system is not enthusiastic about such acquisitions as a general rule. This is because of the now famous Kingsbury and Hall letters (signed in 1913 by AT&T President N. C. Kingsbury and reaffirmed in 1922 by President E. K. Hall). These letters were prompted by the threat of government trust busters to break up the Bell system if it did not stop grabbing independents, and they promised to stop this practice except in special cases where state authorities or overwhelming public sentiment made it necessary.

But, according to *The Wall Street Journal*, occasionally the Bell system simply cannot resist buying a healthy independent in a fast-growing area and Messrs. Kingsbury and Hall are temporarily forgotten. This happened several months ago when it was top bidder at \$200,000 for Tomball Telephone Company, serving 872 phones some 19 miles northwest of burgeoning Houston. "From AT&T's point of view," admits Assistant Vice President Judy, "this was a very happy acquisition."

Henderson went on to say that while the Bell system limits itself to quietly picking up an alluring independent only now and again, a company named General Telephone has been acquiring them so fast it is being called America's "Baby Bell." The nickname fits, he says, because General currently controls some 2,600,000 telephones in 30 states and manufactures its own phone equipment. Only recently, its assets passed the \$1 billion mark, making it easily the nation's biggest independent—topped only by AT&T with assets of \$15.3 billion.

*ENERAL TELEPHONE's growth has been guided by genial 56-year-old Donald C. Power, a fast-thinking lawyer who usually spends his week ends on the train commuting between his apartment in Manhattan's swank Town House and his home in Columbus, Ohio. In three years, he forged General's unwieldy coast-to-coast empire into a tight organization. He added five major independent telephone companies serving some 80,000 phones and topped these late last year by acquiring a controlling interest in Theodore Gary & Co.-then the nation's second largest independent with 567,000 telephones operated by 25 companies in 17 states.

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Last January, President Power announced General Telephone would spend an impressive \$300,000,000 on expansion over the next three years, including the addition of 500,000 new phones. To make certain there will be enough wire to string the thousands of miles of new lines, he recently bought a 15 per cent interest in General Cable Corporation, largest supplier of cable and wire to the independent telephone industry.

According to Henderson, General Telephone's rapid expansion, as a matter of fact, has hoisted it out of the independent phone industry and dropped it in the same league with the Bell system—in the view of other independents. "No company with 2,600,000 telephones and \$1 billion of assets is one of us," he quotes a top independent telephone executive as saying. This promotion to the big time has brought General Telephone both problems and prestige.

Financial News and Comment

By OWEN ELY

Dynamic Growth of Natural Gas

A FINANCIAL bulletin issued recently by the American Gas Association presented an up-to-date discussion of the outlook for the gas industry, which we summarize as follows:

It is forecast that new gas appliances to be sold during the period 1955-59 could use almost 11 billion therms of gas in the year 1960, and produce nearly \$875,000,000 revenues; and during the entire five years the new appliances would produce some \$2.2 billion in revenues. The latter revenues would be contributed about as follows:

House-heating														
Water heaters														23
Ranges														10
Dryers										*				1
Incinerators .														1
														100%

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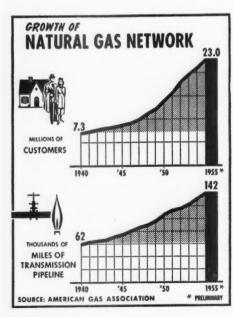
The gas utilities expect to add about 1,200,000 new house-heating customers in each of the next three years, compared with 1,400,000 added during the last heating season. At present 15,400,000 homes, or about 58 per cent of all those using gas for any purpose, are heated by gas; and based on the above forecast the number of homes to be heated by gas will increase to 19.2 by the end of 1958. The present saturation of the potential market is estimated at about 69 per cent.

Or the potential new market, 38 per cent would reflect conversions by present residential users of gas, and 62 per cent would represent new homes. The Middle Atlantic states should add about 491,000 customers, for a gain of 28 per cent; and New England 135,000 units, representing an increase of 85 per cent.

Underground storage reservoirs for natural gas reached a total of 2.1 trillion cubic feet in 1955, an increase of about 13 per cent over 1954. About \$377,000,000 has been invested in these facilities. At the end of 1955 there were 178 storage pools, many of them converted from old and depleted oil or gas fields, and ten more were under construction at the year end. Pennsylvania, West Virginia, Ohio, and Michigan are still the four states in which most of the storage operations are

carried on; Pennsylvania has taken the lead, with the three other states close behind.

The bulletin gave some new data on the big reserves of natural gas in Alberta, Canada. The issue over government aid to the Trans-Canada Pipe Line, a project designed to tap these reserves, recently stirred up a hornet's nest in the Canadian Parliament, Reserves in Alberta are now estimated at 16 trillion cubic feet or about the same as in Kansas, our fourth ranking state. The Alberta reserve is equal to the entire U. S. proven reserves of 1929. The discovery of the Leduc oil field in 1947 resulted in a tremendous increase in drilling activity in Alberta, with 350-400 wildcat wells drilled annually over the past two or three years, most of them oil wells. Almost one-third of these wildcat wells have been successful in recent years, some 40 per cent producing oil and 60 per cent gas.



The present Alberta reserves are considered adequate to cover export commitments already granted by the Canadian government as follows: (1) a total of .4 trillion to Montana via the Canadian Montana Pipeline; 1.1 trillion cubic feet to go via Westcoast Transmission Company to southwestern British Columbia and the states of Washington and Oregon; and 4.4 trillion cubic feet via Trans-Canada Pipe Line to eastern Canada and certain markets in the north-central and northeastern areas of the United States. These figures reflect the total of the anticipated shipments over a period of years, presumably the usual 20-year period.

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R. GEORGE W. GOVIER of the University of Alberta, at a recent AGA conference, pointed out that only about 3,000 wildcat wells have thus far been sunk in Alberta's 200,000 square miles. or about one for every 65 square miles; and that about six times as many wells would be needed to thoroughly explore the area. However, based on a study of the volume of sediments in Alberta compared with the total in the United States, he estimated that ultimate gas reserves in Alberta might exceed 100 trillion cubic feet. Drilling of 500-600 wells a year should assure at least 45 trillion cubic feet of new reserves by 1980, he predicted.

"I believe that the forecasted volume available for export of 400 billion cubic feet per year by 1960, 900 billion by 1970, and over 1.1 trillion cubic feet by 1980 are realistic and probably conservative," he said. "With 150 years' supply of proven gas based on local requirements, Alberta is on the threshold of important export markets. The future will undoubtedly bring large additions to the present proven reserves. These new reserves will support increased export growing to a

total of a trillion cubic feet per year in the 1970's."

Dean H. Mitchell, president of AGA, recently pointed out to a convention of gas utility executives that the gas industry has doubled in ten years. At the end of World War II the industry was producing a little less than 5 trillion cubic feet of gas, which was about 13 per cent of the total energy then supplied in the U. S. Last year over 10 trillion cubic feet of gas were produced, accounting for 26 per cent of total energy.

Using 1947-49 as a base, the price index for gas at the customer's meter had increased only 16 per cent by 1955, while the price of fuel oil had gained 73 per cent and that of anthracite 68 per cent. Mr. Mitchell remarked that "with wage rates and taxes doubling in ten years, material costs increasing 70 per cent, and gas at the wellhead in excess of 200 per cent, it is the miracle of this inflationary age that the cost of gas to the consumer increased only 16 per cent in the same 10-year period."

The chart on page 34 shows the growth of the natural gas network since 1940. Since that year thirteen new states have been added, so that now all but two will be served by the end of this year. The number of customers has tripled since 1940, and the mileage of transmission pipelines has increased 130 per cent. In industry, the doubling of factory labor costs in recent years has considerably increased the use of gas, as an automatic

creased the use of gas, as an automatic and easily controlled fuel; this is particularly the case in the steel industry.

Atomic Reactors—Public Power Threat Increases

A^{TOMIC} energy has been getting into the headlines recently, with the following developments:

Senator Gore of Tennessee and Representative Holifield of California are actively pushing their bill for six large federally built power reactors in different parts of the country. They claim that progress is too slow in getting private reactors under way, and that Russia is gaining the lead in this field. Naturally, public power proponents welcome this development, which would open the door to further "preference" sales to municipalities, PUD's, co-ops, etc. Senator Anderson, on the other hand, feels that passage of his insurance bill (see below) will "firm up" the two big reactors recently authorized-those which Commonwealth Edison and Consolidated Edison are beginning to build-and will expedite progress on other large projects-construction of which has not yet been authorized by the AEC.

Gordon R. Milne of Consolidated Edison, and John W. Landis, assistant manager of Babcock & Wilcox's atomic energy division, presented lengthy papers at congressional hearings in which Consolidated Edison's pressurized-water thorium converter reactor was described in some detail, with charts and pictures. Vice President Fairman of Consolidated Edison made a statement before the Joint Committee on Atomic Energy designed to prove that private industry is not "holding back" and that the company had not "encountered any substantial financial, regulatory, or tax obstacles to date." He declared that if the government were to build large reactors in addition to those planned by the privately owned utilities, the latter projects would be delayed "because it will spread too thin a limited supply of man power, materials, and effort."

Babcock & Wilcox has opened at Lynchburg, Virginia, the first major privately financed plant to make and test reactor

fuels and parts. It will be used in connection with Consolidated Edison's reactor plant.

HE Electrical World (May 28th issue) was specially devoted to atomic power, with a lead story "A-Power Promises to Compete." This included an historical summary from 1942 to date; an article by AEC Director of Reactor Development Kenneth Davis, entitled "Power Reactor Future Is Bright"; a staff article, "Variety Key to Cheaper A-Power," discussing the eight different reactor types; an article on "How Much Will Atomic Power Cost?" by Donald Kallman of Babcock & Wilcox; "Fusion Is Not Practical Process," by S. B. Randolph of Nuclear Development Corporation; and a summary of five interviews, headed "Utility Men Optimistic about Atom."

The story on the estimated cost of atomic power is probably the most interesting of the series. Mr. Kallman makes the following comparative estimates for kilowatt-hour costs in mills for two 130,-000-kilowatt generating plants:

	All-nuclear Plant	Fossil Fu Plant
Fuel Costs	3.1*	4.6
Operation and Maintenance	.8	.6
Fixed Charges		2.7
Total	8.6	7.9

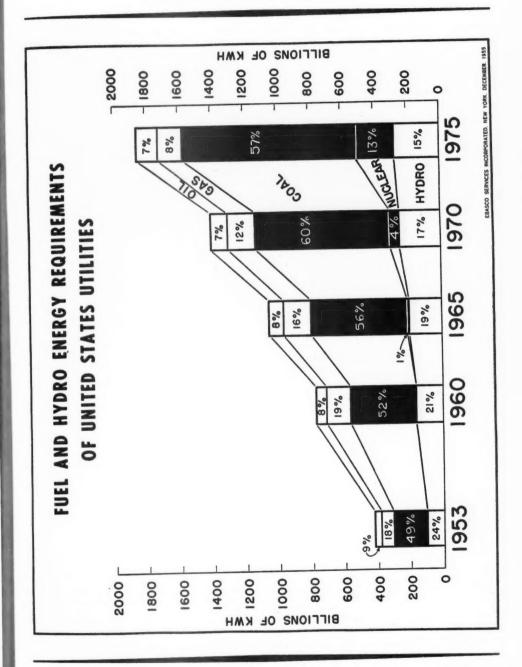
*Includes .5 mills for "inventory charges" on nuclear fuel.

The above tabulation assumes fixed charges of 13 per cent per annum; a load factor of 80 per cent; conventional fuel costs of 40 cents per million Btu with an 86 per cent efficiency; and AEC nuclear inventory charges of 4 per cent per annum.

It seems rather surprising that nuclear fuel costs work out so high when it had been generally assumed that this element of cost would be almost negligible after crediting by-product plutonium or U-233. Mr. Kallman stated that there has been a substantial decline in plant cost quotations as manufacturers have developed confidence in their ability to do the job. He concluded that the energy costs for large atomic power plants range from 7 to 11 mills per kilowatt-hour depending on the size, reactor, and type fuel burned. Pressurized-water reactor plants "appear to be economically attractive" when conventional fuel costs exceed 60 cents per million Btu, he stated.

THE AEC announced that it will extend the buying period for uranium almost five years beyond 1962, but will pay perhaps a little less (\$8 for uranium oxide) and may not take all that is offered; however, producers may be permitted to sell some ore direct to licensed commercial users. The AEC remarked that known ore reserves will be greatly depleted by 1962 unless extended by aggressive development and exploration. It is reported that many small mining companies are dropping out or being absorbed by larger producers.

Some 150 capital stock fire and property insurance companies have formed a syndicate (as earlier proposed) which expects to be able to write \$50,000,000 insurance on each reactor installation, to insure the utility property against damage. Earlier, 100 stock casualty companies formed a syndicate to underwrite radiation liability risks, but this insurance would probably be relatively small. A bill has been introduced in Congress by Chairman Anderson of the Joint Congressional Atomic Energy Committee to provide supplementary federal liability insurance up to \$500,000,000 for each atomic reactor.



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The bill is considered to have good prospects for passage, although the fact that it is being introduced so late in the session is a handicap.

Genie in the Bottle—Electricity Direct from Controlled Fusion?

PROJECT Sherwood, the government's secret program designed to develop power through atomic fusion rather than fission, has several hundred scientists hard at work. The eventual results are of vital interest to the electric utilities. Dr.

Edward Teller, a leader in this field, gave a talk before the American Nuclear Society at Chicago recently, lifting the veil of secrecy slightly. As summarized in *Time* magazine, Teller explained that in the fusion experiment it is necessary to hold the reacting gases together within a bottle by magnetic controls, in order to prevent the heat (which may attain millions of degrees in the gas) from reaching and destroying the interior surface of the bottle. (In the stars a bottle is unnecessary—intense gravitational forces prevent the atoms from flying apart.)

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The trick is to make the magnetism strong enough initially to confine the

MAY UTILITY FINANCING

PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

Date	Amount	Description Bonds	Price To Public	Under- writing Spread	Offer- ing Yield	Moody Rat- ing	Indicated Success of Offering
5/2	\$30.0	Duke Power 1st 3§s 1986	102.31	.78C	3.50%	Aaa	a d
5/9 5/9	16.0 30.0	Calif. Oregon Power 1st 3\(\frac{1}{8} \)s 1986 Niagara-Mohawk Pr. Gen. 3\(\frac{1}{8} \)s 1986	101.34 101.38	1.06C .74C	3.80 3.55	A Aa	b
5/10	4.5	Savannah Elec. & Pr. 1st 3\frac{2}{3}s 1986	102.24	.90C	3.75	A	b
5/16	12.5	Penn. Elec. 1st 3\frac{3}{8}s 1986	102.24	.78C	3.73	A	a
5/18	15.0	Nor. Illinois Gas 1st 3\frac{1}{4}s 1981	100.81	.69C	3.70	A	c
5/23	1.2	Commonwealth Nat. Gas Conv. Deb.	100.01	.070	5.70	4 %	
5/20	4.40	4½s 1971	101.50	N	4.36		е
5/23	30.0	Cons. Edison 1st 3\s 1986	101.38	.62C	3.55	Aa	c
5/24	7.5	Iowa Power & Light 1st 3\s 1986	101.75	.82C	3.53	Aa	a
5/24	40.0	So. Calif. Gas 1st 34s 1981	102.02	.90C	3.75	Aa	b
		Preferred Stocks					
5/1	7.0	Calif. Oregon Power 5.10% Pfd	100.00	2.50N	5.10	_	a
5/2	2.0	El Paso Electric \$4.72 Pfd	102.00	1.95C	4.63	_	a
5/16	9.0	Pennsylvania Elec. 4.60% Pfd	102.25	1.85C	4.50	****	a
5/21	4.0	Sierra Pacific Pr. \$2.44 (\$50 Par)	50.00	N	4.88	_	f
						Earns- Price	
		Common Stock—Offered by Subscription				Ratio	
5/4	9.2	Duke Power	25.00	-	4.00	7.5	g h
5/9	8.0	National Fuel Gas	17.75		5.63	9.4	h
5/10	.5	Piedmont Natural Gas	12.00	N		9.7	1
5/24	5.4	Iowa Power & Light	24.00	.15C	5.83	9.0	J
		Common Stock-Offered to Public					
5/23	.3	Florida Public Utilities	11.25	.75N	5.77	8.6	k
5/	.6	Pike Natural Gas	5.00	N	_	_	1

Source, Irving Trust Company
C—Competitive. N—Negotiated. a—It is reported that the issue was well received. b—It is reported that the issue was fairly well received. c—It is reported that the issue sold somewhat slowly. d—It is reported that the issue sold slowly. e—The issue was offered to stockholders on the basis of \$100 debentures for 30 shares. The issue is convertible at 30½ after June 1, 1957. f—The issue was offered in exchange for the 6 per cent preferred on the basis of 2.3 shares for 1 share of old stock. The offer was underwritten and soliciting dealers were compensated. g—Offered to stockholders on a 1-for-25 basis with oversubscription. Not underwritten; 114 per cent subscribed. h—Offered on a 1-for-10 basis with oversubscription. Not underwritten; 122 per cent subscribed. i—Offered on a 1-for-10 basis with oversubscription; 121 per cent subscribed. j—Offered on a 1-for-10 basis with oversubscription; 121

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ionized gases at the right density and temperature, for a period long enough for the fusion reaction to begin; with the resulting burst of energy and heat, the magnetic field must be adjusted so as to keep the ionized gases under rigid control. The third step is to obtain electric power out of the system without disturbing the balance. Teller stated, "I am confident that controlled thermonuclear reactors will eventually be constructed. I do not believe that the power derived from such reactors will compete at an early date with conventional energy sources..."

The fusion method has several advantages over fission: (1) the fuel, deuterium (found in so-called "heavy water"), can be obtained in any required amount from hydrogen with a practically inexhaustible, inexpensive supply. (2) The danger of radioactive fall out resulting from an accidental plant explosion should be almost eliminated. (3) The reactor might yield electric power direct, since the ions in the "magnetic bottle"

are electrical to start with, and it might be possible to "extract energy from the plasma by varying the magnetic field."

In this connection, while it has been generally assumed that it would be very difficult to obtain electric current directly from uranium reactors (eliminating the boiler and turbogenerator in the power plant) it was recently reported that Dr. Reinhold Rudenberg, professor emeritus of electrical engineering at Harvard University, had obtained Patent No. 2,748,-339 covering a process for converting atomic energy directly into alternating current. However, engineering authorities are reported skeptical regarding the economics of the process. The new device is said to use electromagnetic "lenses" to organize the emission of electrically charged particles from uranium into a steady stream.

The AEC has been debating whether to open up its research files on controlled thermonuclear power. Some 36 companies (including a number of utilities) have obtained permits to see the data.

3

DATA ON ELECTRIC UTILITY STOCKS

Re (M	v. ill.)	6	/13/56 Price About	Div. Rate	Approx. Yield	Cur. Period	Earning % In- crease	12 Mos. Ended	Price- Earns. Ratio	Divi- dend Pay-out	Common Stock Equity
\$25		American Gas & Elec		\$2.00	3.6%	\$3.07**	14%	Apr.	18.2	65%	34%
3		Arizona Pub. Serv		1.00	4.5	1.37		Apr.	16.1	73	31
	0 0	Arkansas Mo. Power		1.24c	5.4	1.90	10	Mar.	12.1	65	30
	7 S	Atlantic City Elec	28	1.20	4.3	1.51	6	Mar.	18.5	79	27
11	8 S	Baltimore G. & E	33	1.60	4.8	2.21	23	Mar.	14.9	72	41
	6 0	Bangor Hydro-Elec	33	1.80	5.5	2.44	6	Mar.	13.5	74	31
	5 0	Black Hills P. & L	25	1.28	5.1	2.15	5	Apr.	11.6	59	27
9		Boston Edison	54	2.80	5.2	3.40	NC	Apr.	15.9	83	53
1		Calif. Elec. Power	15	.70	4.7	.93	30	Mar.	16.1	75	35
1	7 0	Calif. Ore. Power	32	1.60	5.0	2.08	17	Nov.	15.9	77	37
	7 0	Calif. Pacific Util	28	1.50	5.4	2.20**	2	Dec.	12.7	68	29
5	8 S	Carolina P. & L	25	1.10	4.4	1.69	13	Apr.	14.8	65	37
2	5 S	Cent. Hudson G. & E	17	.80	4.7	1.04	4	Mar.	16.3	77	33
1	9 0	Cent. Ill. E. & G	29	1.60	5.5	2.21	16	Mar.	13.1	72	30
3.	3 S	Cent. Ill. Light	56	2.60	4.6	3.69	28	Apr.	15.2	70	41
5) S	Cent. Ill. P. S	32	1.60	5.0	2.44	15	Mar.	13.1	66	35
1	0	Cent. Louisiana Elec	32	1.40	4.4	1.90	25	Mar.	16.8	74	31
3.	3 0	Cent. Maine Power	23	1.40	6.1	1.66	D2	Apr.	13.9	84	33
11	S	Cent. & South West	37	1.40	3.8	2.11	11	Mar.	17.5	66	36
1		Cent. Vt. P. S	16	1.00	6.3	1.19	D7	Apr.	13.4	84	28
10	3 S	Cincinnati G. & E.	28	1.20	4.3	2.01	12	Mar.	13.9	60	39
(0	Citizens Util	15	.48a	6.0a	1.07	3	Mar.	14.0	44	40

Rev. (Mill.)	(Continued)	13/56 Price	Div.	Approx. Yield	Cur.	re Earnin % In-	12 Mos.	Price Earns.	Divi- Common dend Stock Pay-out Equity
(Mill.)	,	About	Rate	Yield	Period	crease	Ended	Ratio	
104 S	Cleve. Elec. Illum	42	1.60	3.8	2.66	34	Mar.	15.8	60 47 75 24
4 0	Colo. Cent. Power	27	1.20	4.4 5.2	1.59 2.22	2 28	Mar. Mar.	17.0 14.0	75 24 72 37
45 S 336 S	Columbus & S. O. E	31 41	1.60 2.00	4.9	2.67	4	Mar.	15.4	75 47
10 A	Community Pub. Serv	23	1.20	5.2	1.78	_	Mar.	12.9	67 51
2 0	Concord Electric	44	2.40	5.5	2.71	3	Dec.	16.2	89 61
65 O	Connecticut L. & P	19	.98	5.2	1.18	4	Apr.	16.1	83 . 33
21 O	Connecticut Power	40	2.25	5.6	2.88	NC	Mar.	13.9	78 42
494 S	Consol. Edison	46	2.40	5.2	3.18	7	Mar.	14.5	75 41
189 S	Consumers Power	48	2.20e	4.6	3.28	12	Apr.	14.6	67 41 64 38
71 S 34 S	Dayton P. & L	46	2.20	4.8	3.46 2.43	15 12	Mar. Mar.	13.3 15.2	66 32
34 S 220 S	Delaware P. & L Detroit Edison	37 35	1.60 1.80	4.3 5.1	2.25	13	Apr.	15.6	80 42
120 A	Duke Power	30	1.20	4.0	1.86	16	Mar.	16.1	65 54
89 S	Duquesne Light	37	2.00	5.4	2.44	16	Mar.	15.2	82 36
27 O	Eastern Util. Assoc	35	2.20	6.3	2.62	11	Apr.	13.4	84 36
2 0	Edison Sault Elec	16	.80	5.0	1.19	NC	Mar.	13.4	67 40
10 O	El Paso Elec.	40	1.80	4.5	2.48	2	Mar.	16.1 12.7	73 37 72 30
11 S	Empire Dist. Elec.	28	1.60	5.7	2.21	17	Mar. Dec.	15.1	85 55
4 O 43 S	Fitchburg G. & E Florida Power Corp	53 48	3.00 1.60	5.7 3.3	3.52 2.45	NC 8	Apr.	19.6	65 34
43 S 93 S	Florida P. & L.	44	1.20	2.7	2.17	27	Mar.	20.3	55 40
163 S	Gen. Pub. Util	35	1.80	5.1	2.73	9	Mar.	12.8	66 39
6 O	Green Mt. Power	17	1.00	5.9	1.23	7	Mar.	13.8	81 37
51 S	Gulf States Util	37	1.60	4.3	2.16	13	Mar.	17.1	74 31 73 47
21 A	Hartford E. L.	55	2.88	5.2	3.97	7	Mar.	13.9 14.9	73 47 82 100
5 0	Haverhill Elec.	39	2.35	6.0	2.62	34 20	Dec. Mar.	18.3	53 42
66 S 8 O	Houston L. & P Housatonic P. S	48 24	1.40 1.40	5.8	1.41	19	Dec.	17.0	99 54
	Idaho Power	32	1.20	3.8	1.96	7	Mar.	16.3	61 35
78 S	Illinois Power	54	2.60	4.8	3.65	17	Mar.	14.8	71 35
40 S 19 S	Indianapolis P. & L	28	1.40	5.0	1.96	27	Mar.	14.3	71 38
19 S	Interstate Power	14	.74	5.3	1.04	4	Mar.	13.5 12.7	71 31 68 31
30 O	Iowa Elec. L. & P	28	1.50	5.4	2.21	14	Apr. Mar.	13.1	76 40
31 S	Iowa-Ill. G. & E	31 25	1.80 1.40	5.8 5.6	2.15	NC	Mar.	11.6	65 35
35 S 30 O	Iowa Power & Lt Iowa Pub. Service	16	.80	5.0	1.09	9	Apr.	14.7	73 33
13 O	Iowa Southern Util	20	1.20	6.0	1.71	5	Apr.	11.7	70 36
56 S	Kansas City P. & L Kansas G. & E	41	2.00	4.9	2.72	30	Apr.	15.1	74 35 64 26
56 S 27 S 40 S	Kansas G. & E	26	1.20	4.6	1.88	4	Apr.	13.8 12.1	64 26 63 27
40 S	Kansas Pr. & Lt	23	1.20	5.2	1.90	21	Mar.	12.3	63 35
37 O	Kentucky Util.	25 23	1.28 1.20	5.1 5.2	2.03	D4 14	Mar. Mar.	14.2	74 38
7 0	Lake Superior D. P Lawrence Elec	30	1.75	5.8	1.87	34	Dec.	16.0	94 62
	Long Island Ltg.	23	1.10	4.8	1.49	35	Mar.	15.4	74 34
17 S 41 S 7 O	Louisville G. & E	59	2.20	3.7	3.92	22	Mar.	15.1	56 35 92 59
	Lowell Elec. Lt	56	3.35	6.0	3.64	19	Dec.	15.4 14.3	92 59 79 76
9 0	Lynn G. & E	29	1.60	5.5	2.03	1	Dec. Dec.	12.4	46 47
8 0	Madison G. & E.	43 17	1.60 1.08	3.7 6.4	3.46 1.02	D31	Apr.	16.7	106 31
4 A 5 O	Maine Pub. Service Michigan G. & E	45	1.50b	6.3g	3.77	14	Mar.	11.9	40 35
144 S	Middle South Util.	29	1.50	5.2	2.25	4	Mar.	12.9	67 35
144 S 26 S	Minnesota P. & L	28	1.40	5.0	2.16	23	Apr.	13.0	65 34
2 0	Miss. Valley P. S	30	1.40	4.7	2.53	4	May	11.9	55 31
10 A	Missouri Pub. Ser	13	.60	4.6	.94	12	Apr.	13.8	64 29 74 36
5 O 37 S	Missouri Util	25	1.36	5.4	1.83	D3	Mar.	13.7 14.9	58 36
37 S 130 S	Montana Power	46 17	1.80 1.00	3.9 5.9	3.08 1.24	15 7	Apr. Dec.	13.7	81 33
130 S 40 O	New England G. & E	17	1.00	5.9	1.48	14	Mar.	11.5	68 40
44 0	New Orleans P. S.	45	2.25	5.0	2.59	D2	Apr.	17.4	87 40
44 0	Newport Elec.	22	1.00	4.5	1.40	16	Jan.	15.7	71 34
77 S	N. Y. State Elec. & Gas	37	2.00	5.4	2.87	17	Apr.	12.9	70 38
77 S 210 S 75 O	Niagara Mohawk Pr	30	1.80	6.0	2.24	4	Mar.	13.4	80 34 64 33
75 O	Northern Ind. P. S	35	1.80	5.1 5.3	2.82	11 10	Mar. Mar.	12.4 14.7	78 33
118 S 9 O	Northern Sts. Power Northwestern P. S	17 16	1.00	6.3	1.44	10	Mar.	11.1	69 25
, 0	ATOLIN COLUMN L. D	40	2100	0.0					

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Rev. (Mill.)	(Continued)	6/13/5 Price About	Div.	Approx. Yield	Cur. Period	are Earn % In crease	- 12 Mos.	Price- Earns. Ratio	Divi- dend Pay-out	Common Stock Equity
123 S	Ohio Edison	52	2.48	4.8	3.67	15	Apr.	14.2	68	38
123 S 40 S		37	1.70	4.6	2.19	13	Apr.	16.9	78	30
15 C		27	1.60	5.9	2.21	15	Apr.	12.2	72	34
443 S	Pacific G. & E.	50	2.40	4.8	3.39	9	Mar.	14.7	71	33
44 C		29	1.48	5.1	1.86	18	Feb.	15.6	80	28
123 S 210 S	Penn Power & Lt	47	2.40	5.1	3.23	6	Apr.	14.6	74	29
210 S 32 O	Philadelphia Elec.	37	1.80	4.9	2.45	8	Mar.	15.1	73	40
	Portland Gen. Elec Potomac Elec. Pr	22	1.20 1.10	5.5	1.71	10	Apr.	12.9	70	39
58 S 77 S 273 S 67 S	Pub. Serv. of Colo	47	1.10	5.2 3.8	1.52 2.73	41 19	Mar. Mar.	13.8 17.2	72 66	40 38
273 S	Pub. Serv. El. & Gas	33	1.80	5.5	2.26	16	Dec.	14.6	80	37
67 S	Pub. Serv. of Indiana	38	2.00	5.3	2.42	Di	Apr.	15.7	83	33
26 O	Pub. Serv. of N. H	17	1.00	5.9	1.20	2	Apr.	14.2	83	36
11 O	Public Serv. of N. M.	13	.68	5.2	1.03	8	Mar.	12.6	66	33
23 S 52 S	Puget Sound P. & L	28	1.28	4.6	1.57	11	Mar.	17.8	82	56
52 S	Rochester G. & E	30	1.60	5.3	2.12	13	Mar.	14.2	75	36
17 O	Rockland L. & P.	18	.70	3.9	.97	20	Dec.	18.6	72	29
8 S	St. Joseph L. & P	24	1.40	5.8	1.70	1	Mar.	14.1	82	40
45 S	San Diego G. & E	22	.88	4.0	1.38	28	Mar.	15.9	64	40
8 O 8 O	Savannah E. P.	36	1.68	4.7	2.45	18	Mar.	14.7	69	28
154 S	Sierra Pacific Pr So. Calif. Edison	22 51	1.20 2.40	5.5 4.7	1.50 3.34	11 10	Mar.	14.7 15.3	80 72	28 36
38 S	So. Carolina E. & G.	20	1.00	5.0	1.37	5	Mar. Mar.	14.6	73	29
6 0	Southern Colo. Pr	16	.70	4.4	1.22	ĭ	Feb.	13.1	57	37
210 S	Southern Company	21	1.00	4.8	1.42	18	Apr.	14.8	70	32
16 S	So. Indiana G. & E	31	1.60	5.2	1.90	D16	Apr.	16.3	84	33
5 O	So. Nevada Power	19	1.00	5.3	1.37	5	Mar.	13.9	73	34
1 0	Southern Utah Pr	17	1.00	5.9	1.04	11	Apr.	16.3	96	38
3 O	Southwestern E. S	19	1.08	5.7	1.64	2	Feb.	11.6	66	31
33 S	Southwestern P. S	26	1.32	5.1	1.51	D4	Apr.	17.2	87	30
21 A	Tampa Elec.	29	1.00	3.4	1.40	3	Apr.	20.7	71	42
127 S	Texas Utilities	40	1.28	3.2	2.06	8	Apr.	19.4	62	38
35 S 12 O	Toledo Edison	14	.70	5.0	1.08 1.70	10 4	Mar.	13.0	65	30
119 S	Tucson G. E. L. & P Union Elec. of Mo	28 28	1.20 1.40	4.3 5.0	1.73	3	Dec. Mar.	16.5 16.2	71 81	33 37
30 O	United Illuminating	53	2.60	4.9	3.22	3	Dec.	16.5	81	51
5 0	Upper Peninsula Pr	29	1.60	5.5	2.18	D7	Mar.	13.3	73	36
	Utah Power & Lt	48	2.20	4.6	3.26	16	Mar.	14.7	67	42
38 S 106 S 24 S	Virginia E. & P.	43	1.80	4.2	2.66	12	Apr.	16.2	68	34
24 S	Wash, Water Power	37	1.80	4.9	2.16	12	Mar.	17.1	83	45
127 S 64 O	West Penn Elec	27	1.40	5.2	2.10	8	Apr.	12.9	67	29
	West Penn Power	49	2.40	4.9	3.26	7	Mar.	15.0	74	33
11 O	Western Lt. & Tel	32	1.80	5.6	2.70	32	Dec.	11.9	67	31
24 O	Western Mass. Cos	41	2.20	5.4	3.19	8	Mar.	12.9	69	52
95 S	Wisc. El. Pr. (Cons.)	33	1.60	4.8	2.44	3	Mar.	13.5	66	39
37 O 34 S	Wisconsin P. & L	25 23	1.28	5.1 5.2	1.75 1.77	9 16	Mar. Mar.	14.3 13.0	73 68	35 35
34 3	Wisconsin Pub. Serv	23	1.20	5.4	1.//	10	Mar.	15.0	00	33
	Averages			5.0%				14.7	72%	
	Foreign Companies									
188 S	American & Foreign Pr	14	\$.80	5.7%	\$2.00	5%	Dec.	7.0	40%	46%
139 A	Brazilian Trac. L. & P	7	.50	7.1	1.18	D7	Dec.	5.9	42	72
63 A	British Columbia Pr	40	1.20	3.0	2.05	37	Dec.	19.5	59	27
16 A	Gatineau Power	29	1.20	4.1	2.06	.5	Dec.	14.1	58	30
11 A	Quebec Power	27	1.20	4.4	1.73	11	Dec.	15.6	69 52	48 35
45 A	Shawinigan Water & Pr	95	1.80	1.9	3.48	30	Dec.	27.3	34	33

A—American Stock Exchange. B—Boston Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the net income available for common stock. **Based on average number of shares. a—Also regular annual 3 per cent stock dividend, which is included in the yield. Stockholders recently were given the choice of taking dividends all in cash or all in stock. b—Also 3 per cent stock dividend December 30, 1955, which is included in the yield. c—Also 2 per cent stock dividend January 10, 1956. e—Also 5 per cent stock dividend June 15, 1956.



What Others Think

Georgetown University Symposium X-rays
Gas Producers' Problems

No one seriously interested in or affected by the raging controversy over whether the Federal Power Commission should or should not regulate natural gas producer sales in interstate commerce can afford to be without the current (June) issue of The Georgetown Law Journal, Volume 44, Number 4. Although primarily a legal periodical, the several searching and competent articles in this issue (which are almost entirely devoted to this and a few allied public utility items) are by no means confined to legalistic aspects of the thorny problem created by the U. S. Supreme Court decision in the Phillips Petroleum Company Case (3 PUR3d 129). There is a comprehensive coverage of such various aspects as natural gas economics, the social and consumer interest viewpoints, the distributing gas utility company position, the conservation and competitive fuel problems involved, and, of course, the essential question primarily involving the independent gas producers' interests.

A mere listing of the distinguished authors of these articles is an indication of the manner in which the Georgetown University Law Center hand picked outstanding contributors with an eye to authority and experience in a highly specialized and increasingly complex field of ad-

ministrative law. The Federal Power Commission is represented by Commissioner William R. Connole. U. S. Senator Paul H. Douglas (Democrat, Illinois), who valiantly defended consumer interest in the U.S. Senate during debate on the since vetoed Harris-Fulbright Bill. takes that point of view. The well-known New York and Washington regulatory practitioner, Randall J. LeBoeuf, Jr., discusses the distributor's problem. Two other Washington legal specialists, Raymond N. Shibley and George B. Mickum, III, write from the pipeline operator's background. The responsibility of clarifying the independent gas producer's position, in this smart company, is assumed and ably fulfilled by Rayburn L. Foster, vice president and general counsel of Phillips Petroleum Company. The conservation and competitive fuel aspect was stressed by Jerome J. McGrath of the District of Columbia Bar and an executive committee member of the Federal Power Commission Bar Association.

Pollowing the signed articles there appears a chronological legislative record of the Natural Gas Act in narrative form, which reviews the events leading up to the Phillips Petroleum Company decision and the subsequent developments which

culminated in the veto of the ill-fated Harris-Fulbright Bill by President Eisenhower. The author of this precis is a member of *The Georgetown Law Journal* board of editors, Donald J. Libert of Virginia, who forthrightly concludes that a majority of the highest court erred in the Phillips decision. There is a brief and pithy foreword by Professor Leo Albert Huard of the Georgetown University Law Center, who is a faculty adviser to the *Law Journal*.

I would be a work of supererogation for this reviewer to attempt to give more than a savor, here, of the arguments made and conclusions reached in the original text of such divergent authorship. A few earlier indications of the line taken by three of these writers have appeared elsewhere: Commissioner Connole in recent testimony before a House Appropriations subcommittee; Senator Douglas in his exhaustive speech in the Senate and previous article in Public Utilities Fort-NIGHTLY (issue of October 13, 1955), and Mr. LeBoeuf before the Practising Law Institute Natural Gas Symposium on natural gas in New York city last April. But these and the other writers are much more effective when read in context, and in juxtaposition exclusively afforded by this particular issue of The Georgetown Law Journal. This gives the reader a sense of balance in weighing so many facets of a most complicated and unresolved question.

Commissioner Connole's article stressed the difficulty of trying to apply traditional concepts of utility regulation to the sales by producers of gas in interstate commerce. He reminds us that "despite a widely held belief to the contrary, there is no universally recognized method of fixing just and reasonable rates for several kinds of utility enterprises." He

points to the danger of oversimplification in any doctrinaire approach to "what is essentially a delicate and difficult economic legal problem."

He is inclined to cautious experimentation. He points out that in the field of transportation regulation, the "operating ratio" rather than the rate-of-return-on-rate-base has produced satisfactory results, through a more flexible formula. He ends on a note of warning against "unnecessary insistence on unworkable standards not subject to such (gas production) regulation." It is noteworthy, however, that Commissioner Connole thinks that producer regulation by the FPC can be worked out, that it is not an impossible thing which must be abrogated by statute, now that the courts refuse to end it.

Senator Douglas wrote a brief history as well as a strong consumer around as well as a strong consumer argument in this controversy. He goes back to discussion in 1937 between Senators. such as the late Senators Borah (Republican, Idaho) and Wheeler (Democrat, Montana), no longer of the Washington scene. From his own lawmaker's background he makes a case for the Supreme Court majority opinion (in the Phillips decision) that Congress did intend that gas producer interstate rules should be regulated, when the Natural Gas Act was passed in 1938. His article (40 pages) is longest of all. It generally traverses the points made in the Senator's four-day speech in the Senate last January. It is noteworthy that the Senator not only favors the retention of FPC regulation of gas producer sales (except possibly for smaller producers) but he also believes that this regulation should be based on the same regulatory concept as the FPC already applies to interstate pipelines and electric utilities.

Randall J. LeBoeuf, taking the view-

point of the distributing gas utility companies, directs his fire at the escalator clauses whereby pipeline companies pass on to the distributors rate increases automatically triggered off by provisions in their contract with producers. Since the distributors are not parties to these contracts, they frequently have no notice, and certainly no power or influence, to alter the terms. But they must pay, nevertheless, because they sit, helplessly, on the receiving end of the pipeline.

LeBoeuf classifies three types of escalation: (1) the "malignant" type which keys price changes to developments outside of the contract and beyond any relationship to the parties; (2) the "inoffensive" type which automatically passes on "valid" cost increases, such as taxes; (3) a sort of "in-between" type on which reasonable men might differ, but which "do not place an unreasonable burden on the ultimate consumer." Proposing compromise legislation, LeBoeuf suggests the outlawing of the first type, permitting the second type where agreed upon in arm's-length bargaining, and placing the third type under regulatory control.

In addition, LeBoeut's proposed law would permit the FPC to regulate and prevent any attempted abandonment of service by a producer, with respect to gas once dedicated to public service. He would also allow distributors and other consumer representatives notice and opportunity to be heard on producer rate increases. Finally, he would *not* insist on the traditional cost rate base approach to producer regulation.

MESSRS. Shibley and Mickum, on behalf of the pipeline companies, saw the Phillips decision as thrusting a welter of vexatious problems upon the pipelines. They are literally "caught in the middle" between the previously unregulated pro-

ducer and the locally regulated distributor. In addition, their own operations are very much regulated by the FPC, even as to their own activity as producers. One need only mention the subsequent decision of the U.S. Supreme Court in the Mobile Gas Service Corporation Case (12 PUR3d 112) in which the unilateral effort of a pipeline company to pass on an escalator producer increase was blocked by the court because of a lack of a commission finding as to the unreasonableness of the rates sought to be superseded. Shibley and Mickum believe that since there is no indication the problems created by federal regulation of producers "can be satisfactorily resolved within the framework of the act," it is increasingly apparent that legislative relief is needed. In short, they believe that producers cannot be regulated by conventional methods, and that to insist that the FPC work out its newly imposed jurisdiction over pipelines on a trial-and-error basis, within the framework of the present law, would involve years of uncertainty and delay, while successive experiments are being court tested. Needless to say all this would impose quite a burden on the intermediate pipeline companies.

Vice President Rayburn L. Foster, who is also general counsel of the Phillips Petroleum Company, made a strong case for the proposal that independent producers should not be regulated by the FPC under the Natural Gas Act (with respect to their sales in interstate commerce) and that Congress never intended that they should be. He points out that, in addition to the expressed exclusion of "production and gathering" to be found in the act itself, Congress has subsequently on two occasions expressed its intent by actually passing legislation to exempt such producer activity. Both bills, of course,

failed by reason of vetoes at the White House (one by Truman and one by Eisenhower). Legally speaking, therefore, the failure of Congress to pass legislation which the President would sign, or to override a veto, leaves intact as the law of the land the Supreme Court decision in the Phillips Case. And that decision holds, as a matter of judicial construction, that Congress did intend to give the FPC comprehensive power to regulate the rates for natural gas sold in interstate commerce from the point of the producer's sales to the point of distribution.

As a practical matter, however, it is hard to dismiss Mr. Foster's argument about what the intent of Congress really was in the first place, in the light of what it has done in the two vetoed bills. It is also difficult to dismiss, on the merits, his argument that gas producers get "absolutely nothing in exchange for government regulation which has been thrust upon them." This is in contrast with the usual prerogatives enjoyed by regulated utilities as compensation for the burden of regulation. Thus, the gas distributors and electric utilities and others have area monopoly rights. But the producers still have active market competition.

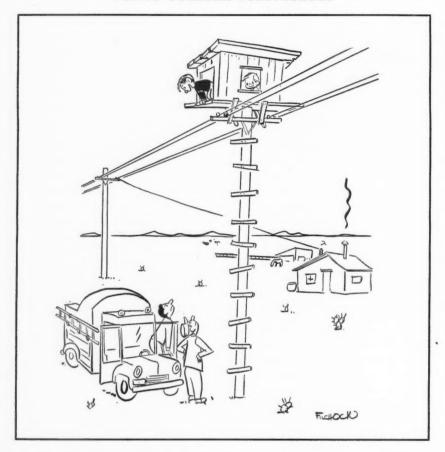
He noted that there are over 8,000 producers in the United States competing for business. Nor is Mr. Foster impressed with the counterargument about producers having "captive customers." He says that this argument is based upon the false assumption that the consumers could and would "do a better job of buying natural gas in the field than the pipeline companies do." He discounted another argument for producer controls based on the fact that gas consumers are bound by the results of contracts between pipeline companies and producers—contracts to which they are not parties and over which they

have no control (even through their distributors). Foster points out that these contracts are made in a competitive market on the basis of arm's-length bargaining.

He notes that no other utility service is burdened by regulation over contracts for raw supplies between such utilities and their producers or sellers of such raw materials going into the rendition of service. Thus, the cost of coal, which may be a very substantial factor in the operating costs of an electric utility, is governed by a contract between the electric utility and the coal supplier which is not subject to regulatory interference.

Mr. Foster scores another point, in disposing of extravagant claims made as to the amount of gas rate increases which consumers would have to pay if producers were exempt by law. (The aggregate suggested figures ranged from \$600,000,000 to \$900,000,000 a year.) There is no space here to show how Mr. Foster deflates this straw man, but he does so. Mr. Foster is less persuasive in his argument that there will be less gas available for interstate markets unless the producers get the exemption they are seeking. This is a question of fact; but so far the evidence is quite inconclusive.

On the question of the effect of production costs on the ultimate consumer, Mr. Foster's arguments are quite fair, and by the same token more effective than some of those used to help the Harris-Fulbright Bill when it was being debated in Congress. Admittedly production costs account for only a few cents out of the dollar which the ultimate consumer must pay on his gas bill. Foster does not attempt to dismiss the difference between regulation and no regulation on a de minimis basis. Nor does he resort to the even more questionable argument of sug-



gesting that the distributing utilities (which may be getting as much as 90 cents out of the consumer's dollar) are somehow making off with the difference in the form of unregulated exorbitant profits.

FOSTER does, however, make a valid point of this situation. (He reviews the varying price margins in different major cities using gas.) He says that the very fact that production costs amount to only a small fraction of the consumer's dollar should suggest that increased volume rather than increased regulation is the real way to lower cost of gas to the

consumer. The implication, of course, is that increased volume could be obtained by increasing the incentive for more production, while the stimulated usage per customer would lower consumer unit costs. This is a question of economics on which there are good arguments on both sides. But, Foster made a *prima facie* argument for giving the producers free rein. He sums it up: "In the light of these huge potential savings to gas consumers by increased volumes, can they afford federal regulation which over the long pull is certain to diminish, if not dry up, the flow of natural gas in interstate commerce?"

JEROME J. McGrath discussed the conservation aspect of the situation. But he dealt only indirectly with the question of whether producers should be subject to FPC regulation. He is more concerned with conserving an irreplaceable supply of a wasting natural resource. He estimates the life of our present natural gas reserves at only twenty-two years - as compared with coal reserves for 1,279 years. (This reviewer is inclined to take the figures cum grano salis.) Admittedly, a fuel with the unique virtues of natural gas (smokeless, ashless, so easy to transport, so economical, etc.) should not be wantonly or uselessly exploited. But a cynical observer might wonder, in passing, how it is that the natural gas industry, with such a vital stake in the conservation of this asset, indispensable to its very existence, should be less concerned about "running out of gas" within a comparatively few years, than spokesmen for the coal industry with a competitive fuel to sell.

Of course, conservation is as conservation does. Mr. McGrath makes a valid point in his review of authorities to the effect that, all other things being equal, natural gas should not be used for inferior uses such as boiler fuel, when it could be used for purposes more conducive to the over-all public welfare. But the implied

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suggestion of interposing artificial restrictions which would prevent the sale or free use of gas, simply for the purposes of erecting a protective market for a competitive fuel, hardly sounds like an altruistic proposal in the interest of pure conservation. Mr. McGrath does not come to grips with the clear and present likelihood that, within little more than a decade, the emergence of commercially practical atomic energy might make the competitive fuel position of both gas and coal a serious economic matter. Conservation, after all, is a relative thing. And conservation, for conservation's sake, is a sterile concept which could bring results as futile and impractical as the artifacts discovered in King Tutt's tomb. If atomic energy is to be the fuel of tomorrow (not to mention solar energy or the electric heat pump) why skimp unnecessarily on the available fuels of today?

Altogether, this issue of *The Georgetown Law Journal* is a worthy collection of materials which should prove very useful in any future discussion or consideration of a controversy which is by no means settled. (Copies of this issue at \$1.75 are available from the Georgetown University Law Center, Washington 1,

-F. X. W.

Are "Conventional Methods" Necessary in Natural Gas Rate Regulation?

STEPHEN R. KAYE, editor of the Cornell Law Quarterly, like others preoccupied with problems of natural gas regulation, is concerned with what happens now that President Eisenhower has vetoed the Harris-Fulbright Bill. His article in the latest issue of the Cornell Law Quarterly recognizes the many questions raised by the Phillips decision. But he deals mainly

with the problem "which must be decided before all else"; namely, the method by which the FPC must regulate the sales of the independent producers. In this connection, his interpretation of the Natural Gas Act and of the pertinent landmarks of regulatory theory set down by the courts is based as much on common sense as legal interpretation. His conclusionthat the FPC is confronted with roadblocks which Congress and not the courts should remove—is supported by the decisions of the past, as they are presented for reanalysis.

The difficulties of this approach—and the hazards of the course for the legal writer, as well as others — are those troublesome practical considerations which have sometimes led the courts to override the nicely reasoned symmetries of logic and to undercut, directly or indirectly, the authority of the past. Even when not discussed, they can seldom be ignored. Precedent, however thoroughly expressed and understood, is not sufficient in itself to determine the future course of regulatory events, as the lessons of recent years may have shown us.

M^{R.} KAYE approaches his topic through the Phillips Case in which, he says, though the court settled the issue of congressional intent, it did not decide whether Congress, in the act, effectively spelled out that intent. The questions that immediately arise are whether the commission is free, in exercising its expertise, to choose whatever method it may deem wise or is confined to the exercise of the legislative powers of rate making and rate review, delegated by Congress to the commission, based upon a statutory standard found in the Natural Gas Act. Kaye takes the position that Congress is bound, in delegating its legislative powers, to provide a standard or method on which the regulatory agency can base its statutory authority and when the commission exceeds it, the particular administrative action will be struck down as a violation of statutory authority. Thus, in deciding whether the commission is free to choose whatever method it may deem wise, the author starts off with at least this qualification—that the commission, in choosing

a regulatory approach, must stay within the bounds of its statutory authority.

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Mr. Kave continues:

The full import of the answers to these questions may be startling. It is the well-considered opinion, to which no writer or expert in the field has taken exception, that the rate base approach . . . cannot be realistically applied as a formula for the regulation of independent natural gas production. Nor would the application of such a "value" approach, often referred to as a "cost" approach or basis, be consonant with the requirements of due process. In contrast, there has been legal justification . . . for the use of such a value approach in the regulation of the gasproducing activities of interstate transmission companies. If the Natural Gas Act empowers the Federal Power Commission to regulate independent production by utilizing either a value or a nonvalue approach, then no attack can be made against the commission for its departure from the use of the rate base. On the other hand, the Natural Gas Act, as a matter of statutory authority and the delegation of the legislative rate-making power, may prescribe the use of "conventional methods" of regulation; namely, the rate base approach. Because of the inapplicability of the rate base approach to the regulation of independent natural gas production, if the commission is forced to adopt a "new" or "novel" method of regulation, this administrative action must, in the absence of an amendment to the act prescribing a new congressional standard for rate making, be struck down as a violation of statutory authority....

THOUGH the court in the Phillips Case decided that it was the intent of Con-

gress to regulate this activity, the lawful fulfillment of that intent by the enactment of a proper statutory standard is yet to be settled. The purpose of this study is to "demonstrate that the Supreme Court has construed the act to impose upon the commission the use of 'conventional methods' of regulation—conventional as of the time of enactment—i.e., a value approach, however that value be determined."

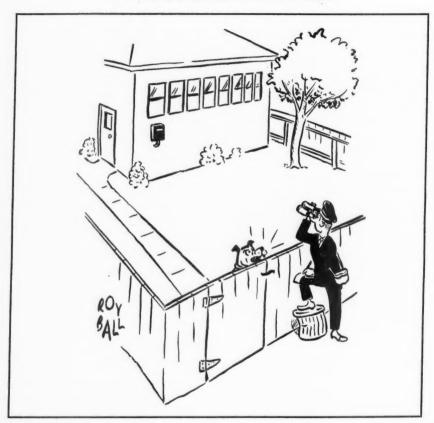
In embarking on a lengthy discussion of the Hope Case, the Natural Gas Pipeline, and Colorado Interstate decisions, Kave asserts that two important areas of law upon which the court focused its attention should be kept in mind: (1) the requirement of substantive due process, often referred to as the "constitutional requirement" of regulation under the Fifth and Fourteenth amendments, and (2) the requirement of an adequate statutory standard for the delegation of legislative power or its corollary, the requirement of statutory authority for administrative action. In the opinion of Kave, these two distinct problems have often been confused, blurred, or merged by the lower courts and the agencies. This has been especially true, he states, when the Natural Gas Act has been involved because the statutory standard of "just and reasonable" found in §§ 4(a) and 5(a) has been construed both as a statutory standard of due process, which coincides with the constitutional requirement, and as the standard by which Congress has delegated its legislative power of rate making.

ANOTHER distinction Kaye makes relates to the court's use of the word "methods." In one context, it speaks of "methods" of determining rate bases, such as "fair value," "prudent investment." "reproduction cost new." "trended

original cost," etc. On the other hand, it refers to ultimate "methods" of regulation such as a value (cost) approach, or a nonvalue (noncost) approach. The rate base approach, a value approach, is to be distinguished from the nonvalue approach, characterized by either: the achievement of a regulatory objective, such as the encouragement of household use of gas or the discouragement of industrial use, by the manipulation of rates: or, rate fixing which uses as its yardstick a competitive market price. Thus, the author asks, when the court declares that only the end result is important, and that the "method" is unimportant in determining the validity of an order fixing rates computed on a particular rate base, is it simply referring to "methods" of determining rate bases, or is it referring to ultimate "methods" of regulation?

DROPONENTS of the view that the commission is free to adopt whatever ultimate method of regulation it deems wisest cite in principal support of their contention. the now famous "end-result" test laid down by Justice Douglas in the Hope Case, where it would appear the court announced that the commission could use any ultimate method of regulation it chose, so long as the result met the standard of "just and reasonable." For Mr. Kaye, one doubt remains. If this principle be true, he asks, what has become of the requirement of statutory authority? Has Congress simply provided or has the act been construed to mean that the constitutional requirement of due process is the sole statutory standard of delegation? No such constitutional evaluation has taken place, the author remarks, the court not having discarded the requirement of a definite statutory standard in the delegation of the rate-making power.

In another section of the Hope opin-



ion, Justice Douglas, in rejecting the contention of West Virginia that regulation should be designed to discourage "resales for industrial use," outlined the limits of the Federal Power Commission's authority under the act as follows:

Moreover, we fail to find in the power to fix "just and reasonable" rates the power to fix rates which will disallow or discourage resales for industrial use. The committee report stated that the act provided "for regulation along recognized and more or less standardized lines" and that there was "nothing novel in its provisions."... Yet if we are now to tell the commis-

sion to fix the rates so as to discourage particular uses, we would indeed be injecting into a rate case a "novel" doctrine which has no express statutory sanction. . . . Such theories of rate making for this industry may or may not be desirable. The difficulty is that §§ 4(a) and 5(a) contain only the conventional standards of rate making for natural gas companies.

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Thus Mr. Kaye joins the issue, with two statements from the same opinion, which read out of context appear flatly contradictory. They were interpreted, the author feels improperly, by the U. S. court of appeals for the District of Columbia in the Panhandle Eastern Case (City of Detroit v. Federal Power Commission) last December, as follows:

But we think this statement [of the "conventional method"], considered in light of the decision made and the specific problem to which the court was addressing itself, does not mean that use of the field price is necessarily prohibited and that the rate base method is mandatory for all properties in all circumstances. The holding in the case is inconsistent with such a meaning, for the court declined even to consider an alleged error in the method used. . . . [Quoting the "end-result" test.]

Thus, according to the writer, this court virtually ignored Douglas' "conventional method" requirement because it appears inconsistent with the consequences of the "end-result" test. The proper interpretation in this author's opinion, would recognize that, in stating these requirements, the Supreme Court was directing its attention to two different problems: on the one hand, holding that no matter what method is used for determining the rate base, the "end result" is the criterion of due process; on the other hand, holding that the commission acting within the "ambit of its statutory authority" must utilize only conventional methods of regulation, lest its action be struck down as a violation of statutory authority. If read this way, he notes, order springs from chaos.

THE Cornell Law Quarterly article goes on to point out that in the City of Detroit v. Federal Power Commission Case, recovery in its rates of 2.56 cents per Mcf would have been allowed Panhandle Eastern if its producing properties had been included in the rate base, whereas the average price being received

by independent producers from Panhandle and being included in Panhandle's operating expenses was 7.7457 cents per Mcf. Thus, it was far more profitable for the transmission company, in most instances, to purchase from the independents. This in turn increased the productivity and bargaining power of, and prices received by, the independent producers. Typical of the effectiveness of this regulatory program is the fact that Panhandle Eastern Pipe Line's own production dropped from 52.4 per cent of its supply in 1942 to about 30.6 per cent in 1951.

In 1954, the commission apparently decided that transmission company gas production had been sufficiently discouraged: that competition among independent producers was healthy, and no longer destructive; that prices were sufficiently high to encourage exploration and development; and that the transmission companies, no longer in a position to exploit the independent producers, should be encouraged to develop their own production facilities. Production by transmission companies would be considerably stimulated, said the commission, by permitting those companies to include as an "operating expense" the gas produced by its own and its affiliates' producing properties, at a "weighted average field price" (determined by competition among unregulated producers), at the same time excluding the value of producing properties from the computation of the rate base.

Mr. Kaye comments on this as follows:

... If this change is viewed simply as a shift from the rate base account to the operating expense account, the commission did not abandon the rate base approach. The commission correctly concluded and expressly limited its holding to the proposition that the Hope Case did not bind the commis-

sion to a "cost" value determination of a pipeline's self-produced gas. Despite this, it appears the majority took a dangerous excursion in dicta, suggesting that perhaps under certain circumstances, the rate base approach might be abandoned. With this indulgence in dicta, Commissioner Draper took a lone but worthy dissent, pointing out the effect of the "conventional method" requirement, but, unfortunately, without distinguishing the due process problem. What he overlooked in his dissent, apparently, was that the commission was not in fact departing from the rate base approach.

INTUITIVELY, according to Kaye, the Supreme Court felt that if the rate base approach were discarded entirely, regulation would be cut loose from any recognizable standard. It justified, therefore, the new requirement, stated in the Cornell Quarterly article, as follows:

It [the rate base approach] has been repeatedly used by the commission, and repeatedly approved by the courts, as a means of arriving at lawful—"just and reasonable"—rates under the act. Unless it is continued to be used at least as a point of departure, the whole experience under the act is discarded and no anchor, as it were, is available by which to hold the terms "just and reasonable" to some recognizable meaning.

Mr. Kaye asserts that this comparison requirement will, in effect, necessitate the use of the results of the rate base approach in the regulation of independent natural gas production. Production regulated through the use of a value approach will invariably mean lower rates to buyers and consumers than through a nonvalue

approach. And since, if this court is correct. "the primary orientation of the act" is "toward the maintenance of low prices for the consumer," courts will invariably choose the approach that will result in lower prices for the consumer, he continues. The paradox, he declares, is that the application of the rate base approach to independent natural gas production would result in chaotic results-where one producer, who was more efficient or had low exploration and development costs, might be required to sell his gas at a fraction of the price charged by another producer who was inefficient or who had high exploration and development costs. The author remarks that the application of such a collapsible yardstick would not long withstand the due process attack.

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In short, the new "comparison" requirement virtually retains the rate base approach for the regulation of gas production, though the question of the commission's power to depart from this approach was not fully decided in the case. The effect, none the less, may be to force the commission, recognizing the inapplicability of the rate base method in the regulation of production, to adopt some "novel" method of regulation, and, in doing so, to violate the statutory ratemaking authority delegated to it in the Natural Gas Act. Kaye's ultimate conclusion, therefore, is that Congress failed to carry out an intent to regulate gas production by failing to provide an adequate regulatory standard. Until such time as Congress may choose to provide a new method by authorizing a departure from the rate base approach, regulation of independent producers by the commission will be legally impossible.

—Е. W. P.

The March of Events



Ten-year Power Shortage Predicted

A "TIGHTENING" of supply of electric power for the Pacific Northwest for 1956-57 and the ten years following is the power outlook for the region, Miller Evans, deputy director of operations and maintenance of the Bonneville Power Administration, reported last month to a BPA advisory council meeting. Delays in scheduled installation of five generators for Chief Joseph dam, will cause difficulty in meeting total power loads of the region in the water year starting this fall, Evans said. The 10-year outlook indicates a power deficit of 394,000 kilowatts by 1965 under median water conditions.

If minimum water year conditions oc-

cur, only very small amounts of interruptible industrial loads could be served and those would depend on steam generation. With median water conditions, interruptible loads could be served with varying amounts of steam required.

Gross revenues from the federal Columbia river power system are expected to be about \$61,000,000 for the current fiscal year—an increase of about \$9,000,000 over 1955, but increased generation costs dropped net revenues from \$8,000,000 to \$6,000,000, Assistant Administrator Byron L. Price reported. H. Loren Thompson, Portland, member of the engineering firm of Stevens & Thompson, was elected chairman of a permanent steering committee for the council.

California

Change in Taxing Utilities Suggested

STUDY of the possibility of a return to the gross receipts method of taxing public utilities in California was suggested last month to the state senate interim committee on government organization by Stanislaus County Assessor K. V. Broadwell.

The committee met in Sacramento to resume its investigation of procedures of the state board of equalization which re-

sulted in increased property tax assessments last year in 14 counties.

The gross receipts method of taxing utilities was in effect in California until 1935, when the ad valorem tax system was applied. Under the old gross receipts plan, the tax was collected by the equalization board and the money went into the state treasury. Since the use of the ad valorem system, the board annually appraises the public utility properties, sets the assessments, and refers the figures to the counties for application and collection.

Idaho

Gas Franchise Controversy Settled

SETTLEMENT of their battle over natural gas distribution in southern Idaho after more than a year and a half of controversy was announced recently by the Intermountain Gas Company and the Idaho Natural Gas Company. They said that Idaho Natural, loser in the protracted fight, had agreed to drop its appeal to the state supreme court. No other details were revealed.

Noting that the agreement "removes the only remaining obstacle in making natural gas available to southern Idaho this year," the utilities said it would enable Intermountain "to accelerate its program of constructing distribution systems in the cities that have granted it franchises."
Governor Smylie said he was "gratified" by the announcement.

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The controversy originated when the state public utilities commission in February, 1955, issued a permit to Idaho Natural after rejecting the distribution applications of Intermountain and the Pocatello Natural Gas Company. This action was unanimously reversed by the state supreme court last October, however, and the commission subsequently withdrew the permit from Idaho Natural and awarded it instead to Intermountain, Idaho Natural had taken the matter to court and was threatening to go as far as the U.S. Supreme Court when reports became current that a settlement was under negotiation.

Illinois

Gas Application Filed

A^N application filed with the state commerce commission by the Central Illinois Public Service Company last month sought permission to operate a gas system in Mason City and adjacent areas.

The utility said it plans to construct a 4-inch transmission main extending from a point near New Holland to Mason City.

Louisiana

Committee OK's Gas Tax Boost

A COMMITTEE of the state house of representatives voted 10 to 5 last month for Governor Long's tax raise bill, boosting the gas-gathering levy but exempting Louisiana industry. The bill is estimated to produce an extra \$20,000,000 to \$25,000,000 a year.

Administration sponsors said it would place most of the tax burden on northern and eastern consumers of the state's resources of natural gas. It would also tap the pocketbook of Louisiana residential consumers too, because the administration feared to exempt them also would raise the threat of unconstitutionality.

Representative Jones, Calcasieu parish, a chief sponsor, explained the raise affecting house consumers of natural gas would amount to about 75 cents a year. The bill is an administration substitute for Jones' original version asking a \$32,000,000 increase. Speaking of the gas-gathering tax, which raises the one-cent rate per thousand cubic feet to $3\frac{1}{2}$ cents, Administration Attorney Charles Reynard said "the effect of this bill will be to pass on the extra tax to out-of-state consumers and to Louisiana home consumers."

THE MARCH OF EVENTS

Massachusetts

House Passes Rate Expert Bill

A BILL passed by the state house of representatives last month and sent to the senate would authorize the state department of public utilities to spend up to \$50,000 a year to retain experts to testify for the public in utility rate cases.

The measure was sponsored by Repre-

sentative Pasquale Caggiano, Lynn Democrat, who contended that the utilities hire "high-priced specialists to appear for them at these rate hearings, while the public is at a handicap because of fund limitations."

Similarly advanced was another bill providing that the state attorney general's office represent the public at all rate hearings of the department of public utilities.

Mississippi

Utility Franchise Approved

CITIZENS of Jackson overwhelmingly approved a 25-year franchise for Mississippi Power & Light Company in a special election held on June 12th. The 60-to-1 vote in favor of the franchise was one of the highest favorable vote ratios ever recorded in the Mississippi capital city.

Mississippi Power & Light had been operating under authority of certain statutory rights granted to its predecessor companies prior to the company's organization in 1923. The request for the 25-year franchise was unanimously approved by the mayor and commissioners of Jackson and publicly endorsed by a number of civic and professional organizations.

Baxter Wilson, president of MP&L, commenting on the election results, said "The spirit and co-operation which were evidenced in this election by the people of Jackson will serve notice to the industrial world of your belief in the free enterprise system and I am sure will mark the beginning of a new era in the growth and development of our city and state."

Nebraska

District Cannot Donate to Chest

THE state supreme court recently ruled that a public power district has no legal authority to make contributions to a community chest. The court directed that \$28,000 contributed by the Omaha Public Power District in 1950 and \$32,000 given in 1951 should be returned. Bonds covering the pledges have been held in trust by the Omaha National Bank pending a decision.

The court held further that a 1951 legislative act, designed to enable the district to make such pledges, is unconstitutional. The state court pointed out that some of the agencies supported by the chest engage

in both religious and charitable activities. Even though such activity is nonsectarian, the court said, it would be "bad," because it makes available to such agencies for religious or educational purposes money it has on hand to an extent not otherwise likely.

Power Loan Approved

A LOAN of \$250,000 to the Central Nebraska Public Power and Irrigation District was approved last month by the board of directors of the Dawson County Rural Public Power District. The action was in answer to a request by Central for

loans from all the rural districts. The money was needed to meet current expenses of construction of a 100,000-kilowatt power-generating plant near Lexington, Central officials said.

The loans are expected to keep construction going until the Rural Electrification Administration approves a loan for the project.

A decision to join a new generation and transmission co-operative also was made by Dawson district. The new group was formed by several rural districts in northeastern Nebraska.

New Hampshire

Tax Proposal Rejected

New Hampshire's state constitutional convention last month voted down a proposal which would have placed electric and gas companies in a special category for tax purposes. The rejected amendment had been intended to make it

clear that the state could continue to impose a franchise tax on utilities in the event the state supreme court should uphold the Public Service Company of New Hampshire in its pending challenge of the constitutionality of the present franchise levy.

Oregon

Pelton Dam Project Gets Jury Approval

No violation of the law by the Portland General Electric Company in failing to obtain an Oregon permit for construction of Pelton dam was found by the Jefferson county grand jury, it was announced in Redmond last month by Jefferson County District Attorney Warren H. Albright.

The case was studied by the grand jury after State Attorney General Robert Y. Thornton had said Albright should bring criminal proceedings against Portland General Electric to stop construction of the dam.

The utility obtained a construction permit from the Federal Power Commission which was upheld by the U. S. Supreme Court, but the state hydroelectric commission denied a permit. Thornton had contended PGE was violating state water

laws when it started construction of the dam May 1st.

PGE on June 12th demanded a hearing on U. S. Senator Richard L. Neuberger's amendment which would halt the Pelton dam project. The company contended Neuberger's amendment to Senate Bill 863 would have the same effect as another measure introduced by Senators Neuberger and Wayne Morse to revoke the license of the company to construct the dam.

Thomas W. Delzell, chairman of the board of PGE, pointed out that the company has spent more than \$2,000,000 on the project to date and has made firm commitments totaling \$13,000,000 on the \$25,000,000 project. Any cancellation would be a repudiation of a federal commitment, which the company felt would be unconstitutional or at least in violation of the Federal Power Act, said Delzell's telegram to the twelve members of the Senate Interior and Insular Affairs Committee.



Progress of Regulation

Trends and Topics

Cost or Value as Depreciation Basis

Reporting of plant assets and depreciation "in terms of true dollar values" is said to be the objective of companies showing not only cost but reproduction cost in reports to stockholders (Public Utilities Fortnightly, issue of June 7, 1956, in the department "Financial News and Comment," at page 848). The argument has been advanced that the true basis for computing depreciation during a year is the value of the property in that year rather than a different value reflecting the original cost of plant. The plant being used for the benefit of customers during the year may have a higher or lower value than its original cost. Moreover, it is asserted, a depreciation reserve accumulated on an original cost basis will, during a period of rising prices, be insufficient to pay the cost of replacing fully depreciated items of plant.

The United States Supreme Court, in the West Case (280 US 234, PUR1930A 225), expressed the view that the allowance for annual depreciation must be based upon present fair value and not upon original cost of property. Otherwise, if values advanced, the allowance would be insufficient to restore property worn out or retired. That decision was rendered over twenty-five years ago, before the fair value rate base was cast aside by the Supreme Court. Courts and commissions, in several decisions, followed the Supreme Court view and used a reproduction cost or value basis for depreciation. For example, in a federal court case involving the Southern Indiana Telephone & Telegraph Company the Supreme Court decision was quoted with approval (1 PUR NS 285).

The value basis was also used in Arizona (13 PUR NS 325), Indiana (10 PUR NS 67), Maryland (1 PUR NS 346), Missouri (22 PUR NS 6), Montana (27 PUR NS 41), New York (6 PUR NS 1), North Carolina (7 PUR NS 21), Tennessee (6 PUR NS 464). In several of these decisions, the West Case was accepted as controlling, without an expression of court or commission opinion as to the merits.

Cost Basis in Relation to Rate Base Theory

The Supreme Court, in the Natural Gas Pipeline Company Case (315 US 575, 42 PUR NS 129) and the Hope Case (320 US 591, 51 PUR NS 193), which rejected the fair value rate base, declared that annual depreciation should be based on cost. Courts and commissions have followed the same theory in recent years. The Alabama commission, for example, definitely ruled that depreciation accruals should not be based on reproduction cost but upon original cost (4 PUR3d 195). The Arkansas commission declared that a telephone company should not be permitted to charge depreciation expense in excess of that required to amortize the original cost of its plant (2 PUR3d 1).

The Michigan commission has said that original cost as the basis for computing depreciation should not be abandoned in favor of replacement cost since the former is stable, easily understood, and has secured almost universal approval over the years both for tax and rate-making purposes (5 PUR3d 301). The North Carolina supreme court ruled that allowances for depreciation should be based upon actual cost not previously recouped by depreciation deductions rather than replacement cost (3 PUR3d 307). Similar rulings have been made in Pennsylvania (96 PUR NS 161), Utah (56 PUR NS 136, 2 PUR3d 75), New York (68 PUR NS 406), North Dakota (55 PUR NS 257). The Federal Power Commission has consistently based depreciation upon original cost.

The relationship between a cost rate base and the basis for depreciation is indicated in a recent ruling by the New Jersey commission on a depreciation claim related to a book cost which contained an item of appreciation. The commission said: "Since the company's claim for rate base, which we adopt, is based on original cost, we are of the opinion that the expense accounts used in calculating operating income should reflect the depreciation charge also based on the original cost" (11 PUR3d 174).

Review of Current Cases

Retroactive Natural Gas Rate Increase Ineffective In Absence of Notice

THE United States court of appeals upheld a decision of the Federal Power Commission denying the right of Cities Service Gas Producing Company to put into effect certain rate increases as of June 14, 1954, the week after the United States Supreme Court decision in the Phillips Case (3 PUR3d 129). That case, in effect, gave the commission juris-

diction over natural gas producers. The producer, in this case, attempted to increase rates retroactively pursuant to a contract with its parent, Cities Service Gas Company.

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Nature of Contract

The proceeding was initiated under commission Order No. 174-A requiring

all natural gas companies coming under the Natural Gas Act by virtue of the Phillips decision to file their rate scedules in effect on June 7, 1954. The rates filed by the producing company were those set out in letter agreements as of June 14, 1954, and August 24, 1954. These rates were higher than any which had actually been charged by the producing company prior to June 7th.

Basic Contract

On April 30, 1953, the producing company and its parent entered into a rate contract which provided, among other things, that the price to be paid for gas purchased and sold should not be more than the prevailing field price paid for gas at the wellhead.

However, the rate contract contained an escalator clause providing for an adjustment in the rates as the prevailing field price varied. The contract rates being charged by the company on June 7, 1954, were lower than those filed with the commission by virtue of the letter agreements of June 14, 1954, and August 24, 1954.

The court held that the commission properly refused to allow the producer to file the rate increases because they were higher than those in effect on the date of the Phillips decision. The company claimed that the initial prices set out in the contract were only tentative prices and that it was intended that the actual price for gas delivered during the months of accounting periods should be the average wellhead price for gas in the field when ascertained, and that when so ascertained, subsequent to the expiration of the period an adjustment should be made. It claimed that this subsequently determined price for the period in which June 7th was included was the real price in effect on that date rather than the lower contract price actually being charged and collected at the time.

Both the court and commission disagreed with this argument, saying that the conclusion was inescapable that the meaning of the contract was that the prices for the gas were the prices set out in the contract, that they would remain until new prices were established in accordance with the formula set out in the contract, and that such new prices should apply only prospectively. The court observed that nowhere in the contract did the phrase "tentative prices" appear.

Furthermore, the contract contained no reference to any agreement to pay retroactively additional sums for past periods when higher prices were established or to make refunds for preceding months when lower wellhead prices were established. In fact, it was pointed out that any rate adjustments which had been made prior to June 7th actually had been applied only prospectively.

Prevailing Field Price Theory

After concluding that the contract clearly contemplated prospective adjustment of prices, the court said it was inclined to agree with the company's contention that the yardstick for the determination of such prices is sufficiently definite. "Prevailing field price" has a definite and well-understood meaning in the gas industry. What is the prevailing field price is a question of fact which can readily be ascertained, and any method which would fairly reflect such price would be a proper yardstick under the contract.

The court concluded that a normal reading of the contract was that whenever either party believed the price being paid no longer reflected the prevailing field price, that party could require an examination of the field prices, and, if its

beliefs were substantiated, might require a change upward or downward as warranted by the examination.

Notice Failure

The court agreed that the contract contemplated prospective adjustments of rates from time to time. The letter agreement constituted such an adjustment. Section 4(d) of the Natural Gas Act provides that no change by any natural gas company in any rate, or contract relating thereto, shall be made except after notice to the commission and the public. This section was in effect on June 14, 1954, when the producing company and its affiliate intended to effect an increase in prices. But they gave no notice of any kind. This failure, according to the court, made the new rates invalid and ineffective. The court distinguished this case from another contract escalator increase which

it had upheld (11 PUR3d 1). It said that the only similarity between the two cases was that in each there was involved a contract containing an escalator clause. In the other case the yardstick for determining the new price was definite and certain. The exact mathematical formula for computing such new price was set out and the exact date when new prices should go into effect was likewise set out. No question of the retroactive application of the new price was involved.

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In that case all the court held was that the price was put into effect when the parties were free to contract, that it was in effect when the commission issued its regulation, and that, therefore, the commission was powerless to set it aside except after a regular hearing under its general rate supervisory powers. Cities Service Gas Producing Co. v. Federal Power Commission, No. 5224, May 4, 1956.

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Natural Gas Sale for Boiler Fuel at Electric Plant Upheld Despite Objections of Coal and Rail Interests

THE United States court of appeals for the District of Columbia upheld a Federal Power Commission order authorizing Southern Natural Gas Company to construct a short pipeline to deliver natural gas to be used as boiler fuel by the South Carolina Generating Company. The appeal was taken by coal and railroad interests who claimed that the loss of revenues that would result from the displacement of coal by natural gas would injure the public interest more than would be compensated by the benefits of the new service.

The commission's presiding examiner had found that the increase in Southern's revenues through sales of natural gas to the electric company would partially offset losses suffered by it through a recent cutback in sales to other consumers. Southern's off-peak load would be diversified and its load factor increased. This would tend to decrease and stabilize unit costs for all gas delivered. He had also found that fuel savings to the generating company would result and that this saving would be passed on to its wholesale customers and eventually redound to the benefit of the ultimate consumers.

Effect on Coal and Rail Interest

Evidence indicated that there would be a displacement of coal but it did not show net decrease of revenue to mine-owner petitioners. Nor was the specific effect of the displacement on sales or mine employment shown. Furthermore, although it was shown that the railroads would lose

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gross revenues, no attempt was made to show their actual net loss in operating revenues.

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The court concluded that there was no legal basis for reversing the commission decision. The commission had considered the evidence bearing on the issue of public convenience and necessity. It considered the public interest in railroad transportation, and in the status of coal mining in its employment and other economic aspects.

The court conceded that the public interest as represented by the adverse effects on the coal and rail interests would suffer by grant of the certificate to the natural gas company. But, it said, the public interest as represented by the benefits to the latter company, to the generating company, to customers of the latter, and to

ultimate consumers could reasonably be found by the commission to be decisive. It said that "had the decision initially been for us, we might have reached a different conclusion, but the judgment of the commission was within its legal competence."

The court said that it was somewhat fortified in so holding by the inability of the coal and rail interests to be more specific as to their net losses and by the further fact that the generating plant was only a few years old. From this it followed that the diversion from coal to gas as the basic fuel at the plant was a reversion, as it were, to the situation which prevailed only a few years ago in so far as coal was concerned. Charleston & W. C. R. Co. et al. v Federal Power Commission, No. 12805, May 17, 1956.

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Rate Base between Original and Reconstruction Cost Upheld as Fair Value

The Arizona supreme court, in concluding that commission rate base findings between original and reconstruction cost were supported by the evidence, indicated clearly that the state's constitutional requirement of fair value did not necessarily mean reproduction cost was the sole or dominant measure of value to be used.

The discussion revolved around whether and to what extent the commission, if required to find fair value, had to consider reproduction cost less depreciation. An appeal by the commission from a lower court's reversal of a power company rate reduction order had brought the case before the supreme court.

The commission contended that its decision was justified under the law as announced in the Hope Natural Gas Case; i.e., that the final result reached and not the method used in attaining it was con-

trolling and that it was unimportant to determine the various permissible ways in which a rate base might be arrived at.

The court disagreed with the commission's reasoning and pointed out that under the state Constitution the commission was required to find fair value and use such finding as a rate base. The Hope Case could not be used as a criterion since, to do so, would violate the state Constitution. While the constitutional mandate did not set a formula for arriving at fair value, it did require such value to be found and used as the base in fixing rates.

The commission argued that fair value as used in the Constitution might be considered synonymous with prudent investment. The court would not approve that theory. Fair value means the value of properties at the time of inquiry, whereas prudent investment relates to value at the time of investment. The former allows

the increase or decrease in cost of construction to influence rates, whereas the latter makes no such allowance.

Evidence As to Fair Value

The task confronting a rate-making body, said the court, is properly to value properties to establish a base that, when related to the fixed rate of return, is just and reasonable to both the company and the consuming public. In the absence of an admitted change in material and labor costs since construction, original cost less depreciation of the physical plant, plus working capital and other necessary items. is recognized as a fair guide. With admitted or proven substantial change in the cost of materials and labor, original cost cannot be accepted as the exclusive measure but appropriate consideration has to be given the factor of increased costs.

The court pointed out that any evidence of present reconstruction cost of an existing plant is at best opinion evidence and carries the weakness of some inaccuracy. It is based upon estimates. The commission may determine the probative force of such estimates and is not compelled to find fair value by mere speculation. The rate-making body does not have to accept reproduction cost estimates at full value.

The company contended that the commission had first determined what earnings should be allowed in order to maintain a sound financial position, attract capital, and pay a fair return on common equity; and second, having thus established the amount the company should be allowed to earn for such purposes, proceeded to adjust the rate of return to any rate base.

If this were true, said the court, it would be an illegal method of establishing a rate base. The standard must be fair

value and not what the commission might believe is a fair rate of return on common equity. Although the evidence might warrant an inference that, possibly, the company's contention was correct, the court did not feel warranted in condemning the commission order on inference when the face of the order indicated otherwise. The court could not say that the commission's finding of fair value was arbitrary or not supported by substantial evidence.

Depreciation Reserve before Reconstruction Deducted

The final order of the commission had recited that the average rate of depreciation which the company had been taking was 4.37 per cent. In accordance with the recommendation of the staff, the annual allowance was revised to 3.28 per cent. The company, in calculating its recommended rate base, had adjusted its depreciation reserve back to inception at the lower rate of depreciation, thereby reducing the depreciation reserve accumulated and resulting in an enlarged rate base. For this reason, the commission had deducted the full amount of the reserve.

The court held the commission's action justified. The company having accumulated the reserve at the higher rate and having charged it to operating expense, the full amount of the reserve before reconstruction could legitimately be deducted.

Mercantile Allocation Deducted

There was evidence that the company was operating a mercantile business independent of activities as a public utility. In operating this business, it used land, building, and fixtures, the total value of which was included by the company in arriving at the plant value. The commission, in its order, had held that some deduction for the mercantile allocation should be made.

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How much the commission had deducted was not evident in the record. Since some subtraction had properly been made for the portion of the property being used for nonutility purposes, the court did not hold the commission's actions with respect thereto improper. Simms et al. Constituting Arizona Corporation Commission v. Round Valley Light & P. Co. 294 P2d 378.

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Hotel Operating "Old West" Vehicle Service Excused from Complying with Commission Rules

THE Colorado commission, in response to a hotel's application for an order terminating jurisdiction over horse-drawn vehicles, historic in design, carrying passengers for hire, or, in the alternative, excusing the hotel from compliance with commission rules, or granting a certificate of public convenience and necessity, decided not to abandon its jurisdiction, but it excused the hotel from complying with rules and regulations.

During the last war, because the use of motor vehicles had been prohibited in sight-seeing service, the commission had held that common carriers by horse-drawn vehicles of passengers for hire were public utilities subject to regulation. The commission did not think termination of jurisdiction at the present time was feasible, since there was always a possibility that an emergency might again arise.

The hotel would not be engaged in furnishing transportation. The mere fact that people were conveyed was immaterial, since the purpose was not transportation in and of itself, but the experience or novelty of the means of conveyance. Since no public need had been shown, the grant of a certificate was not warranted.

The commission decided it would be an imposition to require the hotel to comply with the usual reports, rate hearings, and other matters required of a public utility, since it had not fallen within any of the statutory classifications of a public utility. In view of the fact that the operation was largely incidental to the applicant's other business and difficult to separate therefrom, an order was entered excusing the hotel from commission rules. Re Broadmoor Hotel, Inc. Application No. 14083, Decision No. 45724, April 27, 1956.

F

Telephone Co-operative Wins Territorial Contest And Gets Financing Authority

An area declared to be open territory by the Indiana commission became the subject of a contest between the Clay County Rural Telephone Co-operative, Inc., and the General Telephone Company of Indiana, Inc., for a certificate of territorial authority. The commission awarded the territory to the co-operative over a strong dissenting opinion.

The contested territory had been de-

clared open because of the failure of the Indiana Midland Telephone Corporation adequately to serve the area. The co-operative had a tentative commitment for a loan from the Rural Electrification Administration and indicated a desire to purchase the facilities of Indiana Midland.

The commission found that the rates proposed by the co-operative would be advantageous to subscribers in the area and that they would enjoy a greater toll-free calling area than would be afforded under the system and rates proposed by the General Telephone Company. It was found that inclusion of the territory in the system as proposed by the co-operative would best serve the "community of interest" of the subscribers, and that the co-operative service would otherwise best meet the needs and convenience of both existing and potential subscribers.

A further finding indicated that the cooperative would be able to furnish adequate service within a reasonable period of time. The commission concluded that the public convenience and necessity demanded that the territory be awarded to the co-operative.

New Loan Approval

In another proceeding the co-operative was authorized to borrow \$358,000 of federal funds to be used for construction and improvements, a mortgage being given on all its properties. This authority was granted in addition to a previous debt authorization of \$536,000. Additional equity certificates were approved for issuance in the amount of approximately \$28,000. The commission found that the borrowing of the federal funds would be for the best interests of the public and the co-operative's subscribers. The co-operative's previously approved tariffs, rules, and regulations were authorized to be applied in the newly awarded territory.

Dissenting Views

Commissioner Belshaw dissented from the granting of the territorial authority to a government-subsidized co-operative in preference to a privately owned company. The co-operative, he pointed out, had never operated an adequate telephone plant, had no funds to construct or maintain a plant, and had no employees who had displayed any ability to manage a utility. The company, on the other hand, he said, was a responsible operating utility, adequately staffed, serving a large territory. It had adequate funds and could furnish adequate service within a short time. It had entered into a contract to purchase the existing telephone facilities. Along with its application for the territorial authority, the company sought approval of its contract, both being disapproved.

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The dissenting commissioner also noted that the federal government's policy since 1953 had been to allocate funds to rural electric and telephone utilities only in areas where service could not or would not be furnished by private enterprise. He said that the record of government subsidized rural telephone co-operatives in the state was generally poor.

The dissenting commissioner called attention to a statute relating to commission approval of contracts. It provides that a utility may purchase property "at a price and on terms approved by the commission." This statute, the commissioner noted, permits the commission to examine contracts to ascertain that the price and terms are fair but does not authorize the impairment of the constitutional right of parties to contract generally with whomever they choose upon such terms as they feel are advantageous.

Commissioner Belshaw also dissented from the commission's action in authorizing the co-operative to borrow new federal funds. The evidence upon which the authority was granted he regarded as unsatisfactory. But assuming the accuracy of a staff estimate of revenues at authorized rates, he calculated that 430 years would be required to retire the debt without the impairment of depreciation funds. "The history of this proceeding," he said, "indicates regulatory inconsistencies

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of shocking import, and in my opinion the approval of this second loan of \$358,000 is a financial fantasy." Re Clay County

Rural Teleph. Co-op., Inc. Docket Nos. 25780, 26231, December 22, 1955; No. 26567, March 29, 1956.

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Private Power Company Wins over Co-operative In Service Area Contest

An order of the South Carolina commission denying an electric co-operative's request to prevent a private power company from extending service to a new television broadcasting station located in contested territory, after being sustained by a lower state court, was upheld by the South Carolina supreme court. The company had entered into a contract with the broadcasting station to furnish electric service and had constructed the necessary lines before hearing in this proceeding.

The commission found that, while the co-operative had power lines closer to the site of the new broadcasting station than those of the private company, such lines were not adequate to provide the required service.

The co-operative would be compelled to build a line from a substation 14 miles distant. The company, on the other hand, had already completed a 4-mile line from its nearest substation to the broadcasting station.

The contested area was not then being served by any utility.

In making its decision, the commission took into consideration the comparative sources of electric energy available to the two utilities and their respective probable ability to serve and maintain service to the broadcasting station. The fact that the company was subject to the commission's regulatory authority, while the co-operative was not, was also considered. The commission concluded that the public interest would be better served by allowing the private company to provide the required service.

Holding this evidence adequate to support the commission's order, the court observed that the commission's findings were presumptively correct and its order presumptively reasonable and valid, and that the order could not therefore be set aside except upon a convincing showing that it was without supporting evidence or that it was arbitrary or capricious. No such showing was made.

Certificate and Public Policy Issues

The co-operative argued that the private company could not extend service into the contested area until it obtained a certificate for that purpose. The court ruled, however, that the commission order denying the co-operative's request to enjoin the company from extending its lines was, in effect, one "after due hearing" within the language of a statute excepting the extension from the requirement of obtaining a certificate.

The co-operative further contended that since it had lines closer to the site of the broadcasting station than those of the power company (though the former's lines were not adequate to serve the station), public policy required that the cooperative be given a chance to construct lines to the site and demonstrate its ability to provide the required service. To this proposition the court replied that the state had entrusted the execution of its public policy in such matters to the sound discretion of the commission. Pee Dee Electric Co-operative, Inc. v. South Carolina Pub. Service Commission et al. 92 SE2d 171.

FPC Allocates American Louisiana Gas for Present Markets With Reservation for New Market Needs

F 300,000 Mcf of natural gas per day to be made available through new pipeline facilities of American Louisiana Pipe Line Company, the Federal Power Commission permanently allocated approximately 135,000 Mcf to Michigan Consolidated Pipe Line Company and about 85,000 Mcf to Michigan Wisconsin Pipe Line Company, both affiliated companies. These allocations were found to be sufficient to meet their additional firm requirements for existing markets to 1958. The allocations were based on third-year requirements in order to afford an orderly development of present markets. No account was taken of the companies' interruptible needs, so as to have sufficient gas for firm needs. Nor was any allowance made for their new market needs. After these permanent allocations, approximately 80,000 Mcf of gas remained to be disposed of.

Interveners and §7 (a) (Natural Gas Act) applicants seeking gas for new markets were also involved in the proceeding. While the record as to their requirements was not sufficiently complete to warrant a final disposition of gas to them, it was sufficient to enable the commission to make a reasonable estimate of their anticipated new market requirements. For this purpose it reserved 80,000 Mcf, which safely exceeded the estimate. Pending the time when new markets would be ready to take this gas, whereupon an appropriate order would be entered, the commission temporarily allocated 65,000 Mcf to Michigan Consolidated and 15,000 Mcf to Michigan Wisconsin. The permanent, together with the temporary, allocations aggregated the 300,000 Mcf. This disposition was in substantial conformance with the proposals of the three affected companies.

Immediate Allocations Necessary

The commission cited three considerations which it regarded as fundamental to the determination of a proper disposition of American Louisiana gas between present and new markets, as well as between Michigan Wisconsin and Michigan Consolidated. First, the American Louisiana pipeline project was certified on the basis of the existence of the markets presently served by Michigan Consolidated and Michigan Wisconsin. In that proceeding it was proposed to furnish 200,000 Mcf per day to Michigan Consolidated and 100,000 Mcf per day to Michigan Wisconsin. Although the commission did not in that case address itself to the determination of particular allocations, the opinion and order did define the broad contours which the pattern of service issuing from the new facilities would follow.

Secondly, the need to meet the urgent additional requirements for natural gas service in the areas presently being served was a matter of vital concern in certificating the American Louisiana project. Also under its gas-purchase contracts, American Louisiana was obligated to commence taking gas from its suppliers on June 1, 1956, or to pay for specified contract volumes from that date. Furthermore, the problem of obtaining steel pipe to serve the additional requirements of customers presently being served, together with the addition of a large number of space-heating customers to the systems of Michigan Consolidated and Michigan Wisconsin, demanded an early decision upon the allocations.

The third fundamental consideration which the commission cited was that the present requirements of the utility customers of Michigan Wisconsin (which

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customers included Michigan Consolidated) were known and ascertained. Their needs were urgent, and the record as to them was complete. Since their requirements could be determined without prejudicing any rights of others seeking American Louisiana gas, the commission was convinced that the public interest required an immediate determination of the present needs of existing customers of Michigan Wisconsin, which, of course, entailed a determination of the relative requirements of Michigan Wisconsin and Michigan Consolidated. In these circumstances, the commission rejected contentions that permanent allocations for present markets could not be made until all evidence as to new markets was in. It was ruled that a present decision of the case would not deny a fair hearing or equal consideration to the interveners and § 7 (a) applicants since no competitive rights would be determined.

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In order to insure that temporarily allocated gas would not be committed to firm use pending the determination of new market areas, the commission approved a proposal to limit by tariff provision the number of space-heating customers of Michigan Wisconsin's present utility customers. The same purpose was accomplished as to Michigan Consolidated by limiting Michigan Wisconsin's obligation to deliver to that company.

New Pipelines Authorized

American Louisiana requested authority to construct a 117-mile, 22-inch lateral

pipeline connecting with the main line system at Payne, Ohio, and running to Bridgman, Michigan, at which point it would connect with the facilities of Michigan Wisconsin. This line, though costing nearly \$8,000,000, would provide a short and economical connection. The engineering feasibility of the project was made out, as well as its economic feasibility and other elements of public convenience and necessity.

Without the line, American Louisiana would have to deliver all the gas proposed to be supplied to Michigan Wisconsin and Michigan Consolidated to the latter at Detroit. Out of such delivery, the commission suggested the possibility of serious operational and rate problems. The new line would eliminate these difficulties and provide Michigan Wisconsin with a direct connection with the gas fields of southern Louisiana. Additional assurance of continuity of service and maximum operational flexibility were also suggested as important benefits associated with the proposed pipeline. One commissioner dissented from the granting of authority to build this line.

Michigan Wisconsin was authorized to construct pipelines and other facilities costing approximately \$11,435,000. The commission was convinced that these facilities were required in order to enable the company to handle the gas it would receive from American Louisiana and to render adequate service to existing markets during the forthcoming winter. Re American Louisiana Pipe Line Co. et al. Docket Nos. G-2306 et al. May 7, 1956.

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Commission Unauthorized to Interfere with Utility's Appliance Sales Campaign for Dealers

U PON complaint by an association of propane gas distributors relating to an appliance sales campaign conducted by

Baltimore Gas & Electric Company in connection with the promotion of its services, the Maryland commission, dismiss-

ing the complaint, ruled that it had no authority to prohibit the utility's promotional activities.

The gas association then claimed that the company sent circulars to 31,000 propane gas consumers, offering pecuniary inducements to purchasers of appliances from dealers. It was also charged that the company offered sums of money to dealers for selling appliances and that it subsidized dealer advertising.

The company, in its turn, denied that its promotional activities were unfair or improper, and maintained that the commission had no jurisdiction to interfere in matters of managerial discretion. It was asserted that the co-operation of appliance dealers was most effective in increasing the use of gas and electricity.

The most pertinent Maryland statute provided merely that no public utility should "in respect to any services rendered" extend any discriminatory preference, privilege, or facilities to any person. This provision, the commission said, applies only to "any services rendered" and not to activities of a utility not directly related to its utility service. The statute would not therefore apply in this case. The commission was of the opinion that the activities complained of were not violative of any other laws.

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It was pointed out, however, that if a utility should spend money for promotional purposes, or for any other purpose, "in what could be shown to be excessive amounts and wholly disproportionate to the gains to be accomplished," the commission could disallow such expenditures as charges against operating expenses. Liquefied Petroleum Gas Asso. of Maryland, Inc. v. Baltimore Gas & E. Co. Case No. 5440, Order No. 52269, May 11, 1956.

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Amortization of Abandoned Property Disallowed

A TELEPHONE company applying for a rate increase before the Wisconsin commission sought to amortize losses on property abandoned because of dial conversion. The commission disallowed the claim.

The commission pointed out that it was not equitable to charge future users of service the full loss which the company would incur by changing its type of service. On the other hand, it appeared rea-

sonable to require future users of service to provide revenue in rates to cover the eventual retirement of property due to the dial conversion. The depreciation reserve was increased.

Additional revenues were granted so as to produce a return of 6.54 per cent on the net investment cost rate base, which the commission considered fair and reasonable. Re Bruce Teleph. Co. 2-U-4463, May 4, 1956.

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Bond and Common Stock Issues Approved To Finance Construction

POTOMAC ELECTRIC POWER COMPANY obtained permission from the District of Columbia commission to issue \$10,000,000 principal amount of 35-year first

mortgage bonds and 281,435 shares of common stock of \$10 par value to finance, in part, a large construction program. The company proposed to sell the bonds

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on the basis of competitive bids but requested waiver of a competitive bidding requirement as to the stock. The new shares would be offered to the holders of outstanding stock in accordance with their pre-emptive rights.

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The proposed new financing would not substantially change the capitalization ratios. The *pro forma* debt ratio was shown to be 57.1 per cent and the common stock equity 38.1 per cent, the slightly reduced preferred stock ratio amounting to 4.8 per cent. The commission thought these figures represented a reasonably balanced capital structure.

The interest rate on the bond issue, as well as the price, would be determined by competitive bidding. The evidence indicated that *pro forma* earnings amounted to 3.02 times fixed charges, computed on the basis of an assumed interest rate of

3\(^2\) per cent for the new bonds. The commission was satisfied that the prospective earnings would be ample to support the new debt but conditioned its approval of the issue upon a rate of interest not in excess of 4 per cent, and a price to be paid to the company (before deducting any expenses) of not less than the principal amount of the bonds plus accrued interest.

The proposal to waive competitive bidding as to the stock was approved. The commission provided, however, that it should not be offered to the stockholders at less than \$19.50 a share and required that the compensation to be paid the underwriters should not be in excess of 25 cents for each share of stock offered by the company. Re Potomac Electric Power Co. PUC No. 3571, Formal Case No. 449, May 25, 1956.

Z)

Lower Rate of Return for Telephone Company Because of Uneconomical Operation

MOUNTAIN STATES TELEPHONE & TELEGRAPH COMPANY, having failed to obtain by injunction proceedings rate relief from existing rates prescribed by the Idaho commission, again applied to the commission complaining of the prescribed rates.

Subsequent to the injunction proceedings, the commission had granted emergency relief pending a final hearing.

As the company had been before the commission on several occasions during the last ten years, extensive testimony on matters relating to additional revenue requirements had been received. The same issues involved in the instant proceeding were considered in the earlier cases and extensive findings were then made. The commission therefore considered it unnecessary again to review such issues.

The commission had previously rejected a present value rate base, and although its order was appealed to the state supreme court, the particular issue was not passed upon. While the company did not present new evidence on a present value rate base in this proceeding, it reserved the right to urge consideration of the matter in later proceedings. In any event, the commission said, since the lowest rate base used in any previous case would not produce an excessive rate of return, the matter of a rate base was of no consequence.

The commission determined that on the basis of the existing rates, giving full annual effect to the emergency rates allowed earlier, the rate of return would be between 4.53 and 4.96 per cent.

While in prior rate cases the company had usually been allowed a rate of return

of approximately 6 per cent, several elements were deemed to justify a lower rate. The company had failed to convert manual exchanges to dial operation and thereby incurred increasing expenses by reason of rising labor costs. On the other hand, because of contemplated conversion to dial operation, it was believed that the company would appreciably improve its earn-

ings. Furthermore, other operating economies were expected to be put into effect.

Mindful of these circumstances, the commission made permanent the emergency rates which it had recently authorized and denied any further rate relief. Re Mountain States Teleph. & Teleg. Co. Case No. U-1000-3, Order No. 3818, May 18, 1956.

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Notice of Investigation into Service Area Zoning Ruled Sufficient

HE North Dakota supreme court ruled that a notice served on a motor carrier in an investigation instituted by the commission under a recent motor carrier zoning statute was sufficient to sustain its jurisdiction. The case was, however, remanded to the commission because of a lack of findings to support the zoning order. The statute made it the duty of the commission to zone all "special common motor carriers" who were still operating under statewide certificates. This would, in effect, diminish the operating area rights of many carriers. The court pointed out that the statute was entirely within the ambit of the legislature's power, adding that a motor carrier certificate is a revocable license which may be revoked. altered, or amended at any time for good cause.

In instituting investigations upon its own motion, the commission need not file a specified complaint but is required by North Dakota law to serve interested parties with a written specification of the issues that are to be determined, and then give them an opportunity to be heard. The notice given in this proceeding required the carrier to show its certificate authorizing statewide operations and also show for what zone, together with outside points, public convenience and necessity required its services. The notice was held to be sufficient, and a lower court which reversed the commission on this issue was itself reversed by the supreme court holding.

But there was an absence of findings of fact to support the commission's order. No findings were made with respect to the matters required to be shown in the notice—matters material to a proper determination of the issues. Without commission findings, it was observed, the reviewing courts "were deprived of 'the value which attaches to the acumen and aptitude of skilled men whose business is to hear and determine such questions as the one involved—the value which attaches to their training and experience." Kuhn v. North Dakota Pub. Service Commission, 76 NW2d 171.

3

Fixing of Joint Barge-rail Rates Mandatory upon ICC

Overturning the decisions of a federal district court and the Interstate Commerce Commission, the United States

Supreme Court ruled that it was mandatory upon the commission, under §§ 3 (4) and 307 (d) of the Transportation Act

PROGRESS OF REGULATION

of 1940, to establish a joint barge-rail rate for water carriers, preserving their "inherent advantages," where existing joint rail rates favored the railroads.

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Railroads carrying sulphur from Galveston, Texas, to Danville, Illinois, had established joint rates which were lower than combination barge and rail rates for the same haul. The commission denied a request by the water carriers for a joint barge-rail rate.

Besides prohibiting discrimination, the act requires that the "inherent advan-

tages" of water transportation be preserved. It therefore places a duty upon the commission to establish through routes and joint barge-rail rates whenever a joint rail rate discriminates against water carriers, since such discrimination, if unrestrained, might seriously impair barge service. To hold otherwise, said the court, would be to sanction a rate structure which denies shippers the "inherent advantages" of water transportation. Dixie Carriers, Inc. et al. v. United States 76 S Ct 578.

Other Recent Rulings

Unlawful Procedure by FCC. The United States court of appeals reversed and remanded for rehearing a Federal Communications Commission order granting a permit to construct a television station, where the commission had acted unlawfully in following a procedure which did not conform to the statutory requirement that a hearing officer file an initial decision to which exceptions could be filed. Channel 16 of Rhode Island v. Federal Communications Commission, 229 F2d 520.

FCC Judgment. A Federal Communications Commission finding that an applicant for a permit to construct and operate a television station would be best able, through its stockholder-manager, to meet program commitments was held by the United States court of appeals to be within the bounds of permissible judgment of that administrative body. Tampa Times Co. v. Federal Communications Commission, 230 F2d 224.

Telephone Rate of Return. Upon a showing of increased labor costs resulting from the operation of the federal Fair

Labor Standards Amendment of 1955, a telephone company was authorized by the Missouri commission to increase rates sufficiently to afford a rate of return of 6.75 per cent on an average net rate base, though that rate of return was expected to be reduced to 6.50 per cent by additional investment during the year. Re United Teleph. Co. of Missouri, Case No. 13314, May 10, 1956.

Alternate Route Evidence. Observing that the nature and degree of proof required upon an application by a motor carrier for alternate route authority are different than they would be upon a request to serve new or additional points, the California commission reversed a prior decision and authorized an alternate route, ruling that public convenience and necessity were established by proof that operating economies, expedition, and efficiency would result from the use of the route. Re Victorville-Barstow Truck Line, Decision No. 52603, Application No. 36605, February 7, 1956.

Minority Stockholders' Suit. A federal court ruled that an action by minor-

ity stockholders of a subsidiary railroad company seeking to enjoin a course of action approved by the Interstate Commerce Commission allowing a dominating railroad to take over and operate the subsidiary's properties could not be maintained under a state statute authorizing minority stockholders' suits, since the action was essentially one to enjoin an order of the commission and therefore subject to federal law. W. H. B. Simpson et al. v. South Western Railway Co. 231 F 2d 59.

Return for Company with High Debt Ratio. A return of 3.12 per cent was considered fair and reasonable by the North Carolina commission for a telephone company with a 90.78 per cent debt ratio. Re Oldtown Teleph. System, Inc. Docket No. P-44, Sub 16, May 1, 1956.

Jurisdiction As to Private Road. Upon a contention by a passenger motor carrier that it had authority under a certificate from the commission to use a city-owned private road to a municipal airport, the California supreme court observed that, in any event, the commission had no regulatory power over private roads and therefore could not have authorized the carrier to operate over the private road. City of Oakland v. Burns, 296 P2d 333.

Competition to Improve Service. The Pennsylvania superior court held that the evidence supported the commission's order granting a certificate of public convenience to a motor carrier for the transportation of property within designated areas on the ground that the proposed service would tend to correct or substantially improve existing conditions. Motor Freight Express v. Pennsylvania Pub. Utility Commission, 119 A2d 668.

Merger of Electric Companies. The Federal Power Commission authorized two electric companies serving adjoining territories to merge where the transaction would result in substantial savings in both capital costs and operating expenses and existing standards of service would be maintained or improved. Re Scranton Electric Co. Docket No. E-6601, January 30, 1956.

Rates and Past Operating Results. The California commission refused to base a bus company's rates on past operating results adjusted for unknown factors but based estimates of future operations on past operating results adjusted for factors which could reasonably be anticipated to affect future operations. Re Pacific Greyhound Lines, Decision No. 52813, Application Nos. 34362 et al. March 27, 1956.

Commission Jurisdiction over Constitutional Question. Noting its legislative rather than judicial character, the Louisiana commission declined to rule on the constitutionality of a statute giving it jurisdiction over natural gas utilities, pointing out that it must assume the constitutionality of all legislative acts and be bound by them until they are declared unconstitutional by a court. Ex Parte United Gas Corp. No. 6873, December 22, 1955.

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Timely Appeal Bond Required. On motion of the Idaho commission, the state supreme court dismissed an appeal brought by a transportation company from commission orders, for failure of the company to file a timely appeal bond as required by statute. Re Arrow Transportation Co., Portland, Oregon, 296 P2d 459.

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- 4. High interrupting capacity—large terminal clearances and complete baffling between sections. At 250 volts a.c. on inductive circuits, single break contacts are rated 25 amperes, double break contacts 75 amperes.

Now Delta-Star offers premium control switches at regular prices. Check them without delay-write or ask for Type M-2 Control Switch Price List 72-D4.



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Federal Utility Regulation Annotated (FPC), Volume 2 With Supplement A

These volumes contain the only full annotation of the Federal Power Act and the Natural Gas Act, as administered by the Federal Power Commission.

Supplemental Volume A reports the activities of the Commission during the 10-year period subsequent to the publication of the original volume in 1943. All decisions in so-called "leading cases" have been made the

subject of special editorial comment and interpretation.

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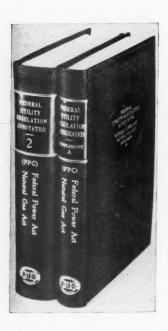
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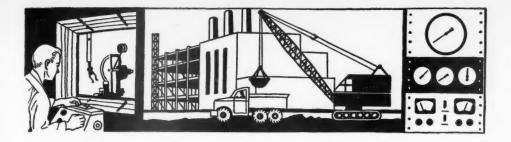
Questions relating to the determination of the cost of projects, accounting, rate-base determinations, rates, service, granting of licenses, extent of the Commission's jurisdiction, definitions of what constitutes interstate commerce, return allowance (involving new views on cost of capital), the very controversial subject of cost allocation in the fixing of gas rates, and many other vital subjects are discussed. The decisions of the Commission and of the courts as well, in such important cases as the Mississippi River Fuel Corporation case, the Alabama-Tennessee Natural Gas Company case and the Colorado Interstate Gas Company case are explored at length in editors' notes.

This two-volume treatise, which has required expert editorial attention for an extended period, in order to classify the Commission's findings under each section of these Acts, is available at \$25. The volumes should be in the possession of all utility executives, attorneys, rate experts, accountants, valuation engineers, utility analysts and others having an interest in the activities, practices and procedures of the Federal Power Commission, and in commission regulation in general.

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Industrial Progress

NYSE&G Continues Large Expansion Program

RK is being started on a second on the site of the New York State ric & Gas Corporation's Milliken n, Joseph M. Bell, Jr., president, unced recently.

e new unit will be substantially

ical with the present generating he said. The turbine generator een on order for some time and pected to be in operation in the f 1958, he added.

e occasion of Mr. Bell's ancement was the dedication of the any's 135,000-kilowatt Milliken electric generating station in of Arnold W. Milliken, vice dent and general manager. With ddition of the Milliken station, ical generating in South Central York by the steam and hydro ic plants of NYSE&G has been d since the beginning of 1950, Bell said.

the ten-year period ending in money invested in construction e company amounted to over 000,000. The electric and gas ruction program for the three ending in 1958 is expected to nt to \$85,000,000.

ibutor-Utility Drive Launches October Fixture Month Campaign

UR-MONTH campaign to orthe cooperation of more than electrical distributors and 300 ic utilities for American Home ing lixture Month in October aunched recently.

full program was revealed by merican Home Lighting Instituring the annual convention of ational Association of Electrical butors in Atlantic City, where istitute held its annual meeting start of the greatest sales year the residential lighting fixture industry has yet seen," explained Ted Cox, the

Institute's managing director. He said that an 8-page booklet, "Here's How," has been sent to every electrical distributor and utility in the nation, explaining the potential of the October promotion and urging their support.

Included in the booklet is an invitation for distributors to participate in joint manufacturer-distributor advertising, and for both distributors and utilities to order and use AHLI's October Merchandising Kit.

A complete merchandising and promotion program, with materials to carry it out, is contained in the AHLI merchandising kit, to be sold at cost for \$10.

Federal Pacific Elec. Appoints J. A. Kerr, Public Relations Director

JAMES A. KERR, formerly assistant to the vice president in charge of sales, has been appointed director of public relations for Federal Pacific Electric Company, according to an announcement by R. C. Graves, vice president. Mr. Graves said that Mr. Kerr will continue to serve as his administrative assistant.

Bulletin Describes New G-E Distribution Arrester

GENERAL Electric's new Thyrite (Reg. trade mark) Magne-valve distribution arresters are described in a bulletin, GEA-6379, obtainable on request from any of the company's sales offices or from G-E headquarters, Schenectady 5, New York.

The 16-page, two color booklet explains the features of the new line of arresters, which use magnetic action of series gaps coupled with valve ac-

"Our aim is to make October the tion of Thyrite disks as do the company's station-and line-type arresters. Tabular data on specifications and applications are included.

Dravo Appointment

WALTER P. BARRETT has been appointed manager of the pipe fabrication department of Dravo Corporation's Machinery Division. His headquarters will be at the firm's Pittsburgh office.

Mr. Barrett joined Dravo in 1935 and has served in various sales and administrative capacities including assistant to the president, manager of the Machinery Division's Philadelphia office, and, most recently, manager of the division's New York office.

The pipe fabrication department furnishes and erects all classes of piping for the oil and gas, chemical, public utility, steel and other industries. The fabrication plant is located at Marietta, Ohio.

Washington Water Power Wins Charles A. Coffin Award For Third Time

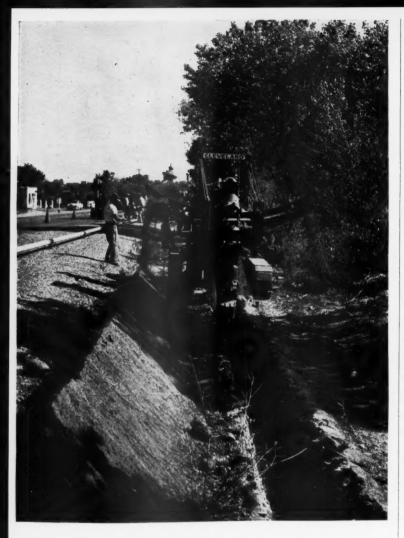
THE Washington Water Power Company recently received the electric industry's highest annual honorary symbol of achievement, the Charles A. Coffin Award.

Presented to the company's president, Kinsey M. Robinson, at the convention of the Edison Electric Institute, the award carried unique distinction both to the company and to Mr. Robinson. It was the third time the award had been won by the Washington company. The company received it first in 1940, two years after Mr. Robinson became president, and again in 1950. In 1936 it was won by the Idaho Power Company, when Mr. Robinson was president of that company.

Washington Water Power Com-

(Continued on page 30)

JULY



THE RIGHT COMBINATION of conveyor, digging wheel and crawler speeds—from more than 33 usable combinations available in the Cleveland Model 110 Trencher—permits spoil to be deposited exactly where desired along-side this narrow, 30-inch deep trench. This "110", shown trenching for a 4-inch main north of Albuquerque, N. M., is one of many Clevelands currently operated by the Southern Union Gas Company, Dallas, Texas, in gas distribution work on its Arizona, New Mexico and West Texas systems.

THE CLEVELAND TRENCHER CO.

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INDUSTRIAL PROGRESS

(Continued)

pany was selected as recipient. Coffin Award after a noming panel, representing every sectified the nation, had reviewed the applishments of electric operating panies in 1955 and nominated fit consideration by a Committed Judges. The judges were Dr. Jan Killian, president of Massach Institute of Technology; C. Wologg, past president of the Electric Institute, and Harllee B. Jr., president of the Edison E. Institute.

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The judges, in the words of citation, based their decision of extraordinary and enlightened ership" displayed by the Washi company "in a struggle for su of free enterprise in the electr dustry." This occurred "in a sect America where huge Federal Go ment expenditures had been and being made for the production transmission of electric power, tion in which for many years s sentiment for socialization of power industry had been prevaled in which discriminatory statute regulations had placed destr power in the hands of opponer free enterprise." And more spec ly, "for winning and holding, i face of this powerful opposition friendship and good will of its tomers and other people of thea dramatically illustrated by an whelming vote in favor of p ownership in Stevens County, V ington."

Presented annually in recog of outstanding achievements by tric companies, the Coffin Awar established in 1922, as a tribute memory of the late Charles A. (founder of the General Electric pany. It was presented to Mr. Is son by Ralph J. Cordiner, preof the General Electric Compaceremonies conducted by Mr. Br

Fall Range Campaign Announced by EEI

BUILT around the theme, "No Measures Up To Electric Coot the Fall Range Campaign of the son Electric Institute has been nounced by Robert L. Coe, chain of the EEI Residential Promander Committee and residential salest ager of the Union Electric Comof Missouri.

The campaign, which will rumonths of September, October November, offers many attrasales aids and materials designed a locally coördinated electric.

ign. They include: a dealer disit of 13 window and store dispieces, one stick-on sales reand a tetrahedron mobile

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the a the a per sales aids, available to tie in rating this basic display material and ated figent traffic builders, are enameled mmitted ticks and a plastic measuring cup ing the theme slogan and electric features, a measuring spoon set C. W. arrying the electric cooking mesthe E llee Br and a selection of three different

measures.

mple kits have been mailed to on E es. The deadline date for orderds of nese coördinating campaign ma-sion as is July 6th.

Washing In Issues New Catalog on or surelect, eries 5700 Power Derrick

electri a secti PAGE, two-color catalog on the ral Go Series 5700 Power Derrick has n and published by J. H. Holan Coruction ion, 4100 West 150th street, wer, pland 11, Ohio.
ears se catalog contains capacities and

on o nsions, construction and operate-evaler eatures and a photographic ex-catute tion of Holan's exclusive hyic sleeves for locking the side

w Bulletin on Steam Pumps

W to Install and Take Care of n Pumps" is the title of a new 23bulletin by Worthington Cor-

ecifically designed to aid operaand maintenance men in adding of reliable service to steam s, the new literature offers 28 n proper installation, and 54 tips ld-proven care techniques. radditional information or copies ss requests to Worthington Corion, Advertising & Sales Promo-Department, Harrison, New Jerpecifying Bulletin #G-2280 P.

Industry Achieves Record in Accident Frequency Rate

the second consecutive year, the utility and pipeline industry ved a record low accident frey rate, according to the Ameri-as Association. The 1955 data, on reports from 392 gas utilities pipelines, representing 92 per cent workers in the industry, shows disabling injuries per million hours worked. This was 1.7 per ower than the previous low frecy rate of 10.48 established in

e new record marks the eighth ssive annual decline in accident 1956-PUBLIC UTILITIES FORTNIGHTLY

frequency rates from the postwar peak of 21.86 injuries per million manhours worked in 1947. The number of disabling injuries per 100 employees declined to 2.11 in 1955, a new low which was 1.4 per cent under the 1954 rate of 2.14, the previous low.

"Lamp King"

A NEW type of aerial lift specifically designed for all street light maintenance work has been introduced by Maxwell Equipment Company. Its makers claim it will do two to three times as much work as the conventional aerial ladder and, in addition, will do many important jobs that would be impossible for the aerial ladder to accomplish.

Basically, the Lamp King is a hydraulically operated boom for carrying workers aloft and maintaining them on a constant work base at any required level. It is equipped with an insulated crow's nest, and outer boom, with guaranteed dielectric strength of 20,000 volts, and rotates upon a truckmounted turret. The turning arc of the turret is 400°-40° past full circle.

Further information may be obtained from Maxwell Equipment Company, Inc., Ford street, Milford, Connecticut.

Highway Trailer Company Advances Three to Executive Posts

THE election of William J. Mesler as vice president-credit and Curtis N. Christy as treasurer of Highway Trailer Company was announced recently by Harold J. Meagher, president. The appointment of Baxter L. Schroeder as sales manager of the utility division also was announced as a further management advancement

Highway Trailer Company, which operates as a division of the Equipment Department of Merritt-Chapman & Scott Corporation, manufactures an extensive line of commercial trailers and also is a major producer of earth boring machines, utility bodies and other equipment used in the construction and maintenance of public utility lines.

New Gas Appliances to Increase Sales and Revenues

IN 1960, new gas appliances sold from 1955 through 1959 could use almost 11 billion therms of gas and bring in revenues of nearly \$875 million, in terms of 1955 prices, the American Gas Association estimates.

These figures represent one full (Continued on page 32)

Tax-Exempt Bonds

Trends and outlookmid-year 1956

Our Mid-Year Survey of the Tax-Exempt Bond Market will help you appraise the opportunities in today's market and relate them to your own investment situation.

Seldom has the investor been able to obtain as much take-home yield as is now available from state, municipal and other tax-exempt bonds. And, in addition, tax-exempt bonds offer widely recognized qualities of safety, stability and marketability.

Send for this Mid-Year Survey for up-to-date information on the tax-exempt market, developments in supply and demand, an interpretation of the trends and outlook for prices. You'll receive with it our tax chart showing the income reguired from taxable securities to equal the yield from tax-exempt bonds.

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year's use of all appliances actually sold in 1955, plus a year's use of all gas appliances that can be realistically sold from 1956 through 1959, which are used as additional appliances—that is, they are not to be used to replace similar gas appliances. During the 1955-1959 period, these appliances should use a total of about 28 billion therms of gas and add \$2.2 billion to revenues. These totals would exceed the 1955 sales and revenues to all residential customers.

In a previous estimate A. G. A. stated gas utilities expect to sell about 34.7 per cent more gas to residential customers in 1958 than they did in 1954. However, if potential sales of appliances are realized, that level of sales might be achieved by 1957 and by 1958 residential sales of gas could total 29 billion therms, an increase of 9 billion therms over 1954.

Deaeration—Why? How?

COCHRANE Publication 4650 explains in capsule form the fundamentals of deaeration and why it is so necessary in water conditioning. The principles of operation as well as the

advantages and application of the various methods of deaeration are discussed. Copies may be obtained from Cochrane Corporation, 17th street below Allegheny, Philadelphia 32, Pa.

New JCP&L Station Nearing Completion

THE Jersey Central Power & Light Company's Larrabee substation, under construction just north of Lakewood on the Farmingdale Road, is nearing completion.

Clyde A. Mullen, vice president in charge of operations, said that the new power terminal is expected to be in service this summer. The entire project will cost approximately \$3,500,000.

Western Precipitation Names McGrane Chief Technical Engineer and Board Member

WESTERN Precipitation Corporation has announced that Norman M. McGrane, a veteran of thirty-one years with the organization, has been promoted to the post of chief technical engineer, and also has been elected to the corporation's Boar electi Directors.

Mr. McGrane is well-kr throughout the dust and fly as umin covery industries, having been gaged in this field of work sind joined Western Precipitation poration in 1925. For many year has b specialized in the mechanical pha & W Chain recovery operations and until rea was chief functional engineer fo ssell. ninized company's Multiclone (cyclonic) Dualaire (filter) lines of reco trengt ance equipment. plicat

However, his experience in the trical precipitation (Cottrell) pha operat recovery operations has also been ping tensive—particularly with the stantly increasing popularity of (Combined Multiclone-Precipita nd, g installations to meet the requirem hone ' of modern gas-cleaning operati are de And in his new duties, supervising and m functional engineering of Wes Precipitation's Cottrell Precipit and CMP installations, as well those of Multiclone and Dua equipment, Mr. McGrane's years of widespread experience

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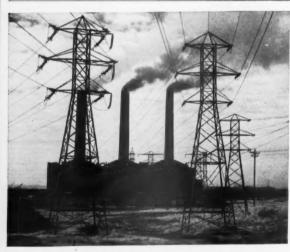
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(Continued on page 34)



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's Boat electrical and mechanical rev operations will prove parwell-krirly advantageous.

fly asl uminized Wire and Wire g been **Products**

rk sine ation Jorful 6-page flyer, Bulletin DHny year has been released by the Page cal pha & Wire Rope Division, Ameri-til reo Chain & Cable Company, Inc., iter fo esser. Pa. It describes ACCO clonic minized products, wires that have f recotrength of steel and the corrosion tance of aluminum.

in the oplications of this highly ductile whose coatings withstand form-1) pha operations and the one-diameter so been ping test without fracture inthe e chain link fencing and barbed y of (: ASCR core wire; strands for ccipita; ANCK cole wire; nd, guy and messenger wires; number wire: tie wire; and lashing operati are detailed. Physical characteris-We and miscellaneous applications inng corrosion and corrosion recipit led with high operating temperas wel are also discussed.

Atomic Products Plant Starts Operations

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AT was once a quiet farming six miles east of Lynchburg, Va. me an atomic age landmark rely as The Babcock & Wilcox Com-V Nuclear Facilities Plant began uction on the site. According to company the plant is the first mafacility in the nation erected eny at private expense to manufacand test nuclear fuel elements and ted products for peacetime use.

of put and of the James river, the new t is divided into two spheres of hroug vity a nuclear fuel element fabrion unit, and an experimental unit re reactor core components will tudied and tested.

he fabrication building, covering ritative rea of 32,000 square feet, has commetal casting, rolling, welding machining equipment to turn out plat type fuel elements. Produchas already begun here on a year's ply of fuel elements for the U.S. mic Energy Commission's Mals Testing Reactor at Arco, Idaho. very of the first 35 assemblies unthis contract is scheduled for Auof this year.

aborek & Wilcox also has conted to design, fabricate, erect and the nation's first privately owned ear steam generator for the Conlated Edison Company of New k, Inc. Production of fuel elets for this reactor will begin as

soon as final design details have been completed.

Initial operations in the new plant's experimental facility will be devoted to determining the nuclear characteristics of the Consolidated Edison reactor design. The first core assembly made to one-quarter scale, will be tested at a power level which will seldom exceed the output of an ordinary flashlight battery. Thorium, which is converted to new reactor fuel as fissioning takes place, will be a component of fuel elements employed in tests here, representing the first nuclear use of thorium by private indus-

The experimental facility, which is 1,200 yards from the fabrication building, is slated for completion in the near future. A reinforced concrete bay nearly three stories high, and with walls running to a thickness of three feet, forms the test chamber for critical assemblies. Space for offices, shops, a control room, laboratories, a vault and other units has been built into a low wing of conventional construction adjoining the bay.

While early activities at the plant involve existing contracts, Alfred Iddles, president of The Babcock & Wilcox Company, pointed out that the (Continued on page 34)

This is not an offering of these shares for sale, or an offer to buy, or a solicitation of an offer to buy, any of such shares. The offering is made only by the Prospectus.

812,791 Shares

Pacific Gas and Electric Company

Common Stock Par Value \$25 per Share

Rights, evidenced by Subscription Warrants, to subscribe for these shares at \$45 per share have been issued by the Company to holders of its Common Stock of record June 12, 1956, which rights expire July 2, 1956, as more fully set forth in the Prospectus.

The several Underwriters have agreed, subject to certain conditions, to purchase any unsubscribed shares and, during and after the subscription period, may offer shares of Common Stock as set forth in the Prospectus.

Copies of the Prospectus may be obtained from any of the several under-writers only in states in which such undercriters are qualified to act as dealers in securities and in which the Prospectus may legally be distributed.

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Lahman Busthore	Marrill Lynch Pierc	Fannar & Reans

Lehman Brothers	Merrili Lynch, Pierce, Fenner & Beane				
Stone & Webster Securities Corporation	Union Securities Corporation				
White, Weld & Co. First California Company	W. C. Langley & Co. Schwabacher & Co.				
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entire unit has been designed to manufacture and test a broad range of present and future reactor and fuel element types.

Commonwealth Edison and American G & E Plan To Connect Systems

AMERICAN Gas and Electric Company and Commonwealth Edison Company have revealed plans for an extra-high-voltage transmission tie line between their two electric power systems. It is estimated that the line and related facilities in Indiana and Illinois will cost close to \$25,000,000.

The project was announced jointly by Philip Sporn, president of AGE, and Willis Gale, Edison chairman.

Because the systems of American Gas and Electric and Commonwealth Edison are closely interconnected at New Carlisle, Ind., and Edison's State Line generating plant with the power system of the Northern Indiana Public Service Company, arrangements for the new line have been worked out in coöperation with Dean Mitchell, president of NIPSCO.

The new line will operate at 330,-000 volts, the highest voltage now in commercial service in the United

States.

The transmission line will be 90 miles long. It will connect a new terminal at New Carlisle, to be built by Indiana & Michigan Electric Company, a subsidiary of AGE, and a big new Edison distribution center, to be built at Goodings Grove near Orland Park, Ill. Approximately 500 steel towers, most of them 145 feet high, will be needed to carry the conductors.

The new line initially will be able to transmit 300,000 kilowatts. Ultimately, the capacity may be expanded to as much as 1,000,000 kw.

Texas Gas Transmission to Install 700-Mile RCA System

CONSTRUCTION of a 700-mile RCA multi-circuit microwave radio relay system, which will span a five-state area to link all compressor stations and key operational offices of Texas Gas Transmission Corporation, will be started this summer, according to a joint announcement by W. T. Stevenson, President of Texas Gas, and C. M. Lewis, Manager, Communications Products Department, Radio Corporation of America. The microwave relay system is part of a current \$20,000,000 Texas Gas construction program.

The installation, a "turnkey" job, which will cost more than three quar-

ters of a million dollars, the statement said, includes all necessary microwave station buildings and towers from Texas Gas headquarters in Owensboro, Ky., to the corporation's Louisiana Division offices in Lake Charles, La. It will link the company's 23 compressor stations and numerous field offices and installations in Kentucky, Tennessee, Mississippi, Arkansas and Louisiana. The contract also calls for operational personnel to be trained by RCA.

Appalachian Power Plans to Build 60,000 KW Hydro-Plant

APPALACHIAN Electric Power Company announced recently that its board of directors has authorized the carrying out of all necessary steps to build a hydro-electric power plant of at least 60,000-kilowatt capacity on the Roanoke River at Smith Mountain in Virginia. Appalachian is a subsidiary operating company of American Gas and Electric Company.

These steps include immediate application to the Federal Power Commission for a preliminary permit, completion of explorations of the damsite, and arrangements for disposition of roads affected by the reservoir.

Upon satisfactory completion of these requirements, and the obtaining of any necessary governmental consents, licenses or authorizations, construction will be undertaken immediately. The project is estimated to cost \$20,000,000.

Research Group Formed to Explore Uses of Electronic Computers

FORMATION of the first combined research group to fully explore possible uses of electronic computer systems in solving operating and engineering problems in the electric and gas industry was announced recently by Walter T. Lucking, president of Arizona Public Service Company, in Phoenix, Arizona.

Initial participants in the research group include the Arizona utility, American and Foreign Power Company, and Remington Rand.

Aims of the group are to broaden existing methods and to develop any new methods in the field of computer applications of an operating and engineering nature for the electric and gas industry.

"Because of the great potential these computer systems hold for the industry, we feel it is important to develop the techniques of full use as rapidly as possible," Mr. Lucking stated. "By bringing togeth separate skills and techniques to speed this development."

Headquarters for the resear be in Phoenix where the gro study computer applications Univac system recently orde Arizona Public Service.

Formation of the study grolows the announcement that I Public Service had ordered a R ton Rand Univac. Not only is Service the first western utility chase a Univac, but is the first to plan its use as a general management, according to a nouncement. Previous utility been limited to specific applies

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Consumers Power Names Plant in Honor of Dan E.

CONSUMERS Power Comnewest steam-electric generating tion, to be built on Saginaw Bar Essexville, Michigan, has been nated the Dan E. Karn plant in of the company's president, by of the board of directors.

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Mr. Karn has been associated Consumers more than forty year has been president since 1951, viously, he served as first vice dent, and before that for many as vice president and general many

The first unit will have a capate 250,000 kilowatts, the largest unit on the company's statewitegrated system, and is schedule operation in 1959.

Construction of the Karn plane a part of a long-range program is expected to add a million kilo system capacity by 1962.

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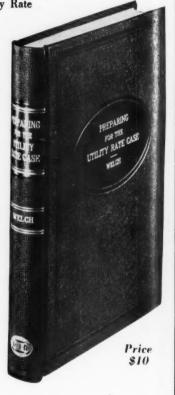
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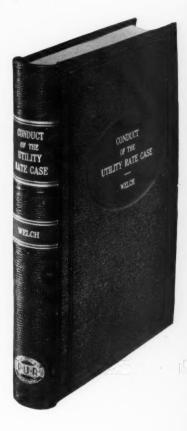
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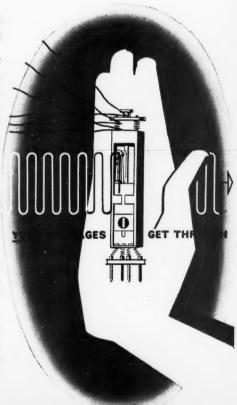
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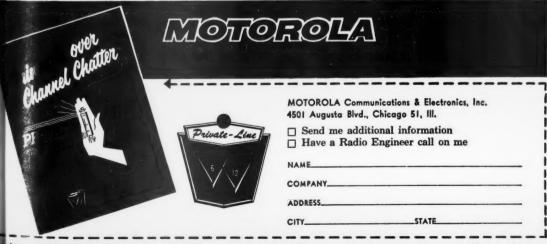
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